Cold Infinity

UVSC

Universal Vectored Space Combat

Campaign Rulebook

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20.0 Introduction

This **Campaign Rulebook** presents rules for designing and running a **Cold Infinity** campaign. If the basic and advanced rules paint a picture of individual ship-to-ship combats, a campaign's canvas is an entire star system or galaxy, with technology, trade, diplomacy—and, hopefully, war.

The Campaign Rulebook begins with Rule 20, which makes it possible to easily distinguish between these rules and those found in the Main Rulebook.

The Campaign rules assume that you are playing with the advanced rule set. The backbone of a campaign will always be the research and development of technologies and fleets, which means that the ship design rules from the Main Rulebook are effectively non-optional.

20.1 Campaign Styles

Six different campaign styles are presented in this Rulebook, grouped into two major categories: **4X** and **RTS**. These correspond roughly to the two similarly named computer-based game genres, though there are some notable differences.

20.1.1 4X Campaigns

A 4X campaign is so called because it involves four axes of action: explore, expand, exploit, exterminate. Within the realm of **Cold Infinity**, there are four kinds of 4X campaigns: **homeworld campaigns**, **empire campaigns**, **trade campaigns** and **solo campaigns**.

In a **homeworld campaign**, every player begins the game with ownership of a single home system and (usually) minimal space technology. The object of the game is to expand outward into the galaxy and encounter other species (players). Homeworld campaigns will usually last a set number of years (turns), after which the "score" is tallied and a winner is determined by previously agreed criteria.

The primary feature of a homeworld campaign is the use of a **technology tree** (or **tech tree**). A tech tree controls how and when each faction in the game can acquire new technologies and deploy new kinds of ships.

In an **empire campaign**, every player begins the game with an established empire of roughly equal size and strength. The object of the game is usually to eliminate the other players and be the sole power in the galaxy, although other winning conditions can be decided by the players. A major subtype of the empire campaign is the **trade campaign**, in which the object is to become the largest trading empire, with a yearly income above a certain set amount.

The **solo campaign** is not, strictly speaking, a solitaire game, but it is the kind most amenable to being played alone. In a solo campaign, the players control (at first) only one ship each. They must then make their way in the galaxy, building their own personal empires through trade, piracy and conquest. The players may work together or against one another. Solo campaigns are usually played with the aid of a gamemaster, whose job it is to control the various non-player ships, worlds and empires that the player or players encounter.

20.1.2 RTS

The RTS or **real time strategy** campaign does not concern itself as greatly with the intricacies of exploration and expansion. Within the envelope of the RTS style there are two **Cold Infinity** campaign types: the **chess-master campaign** and the **go-master campaign.**

Put simply, the object of a **chess-master campaign** is to eliminate enemy units and capture the enemy's home base. The object of a **go-master campaign** is to occupy the most amount of territory.

RTS-style campaigns tend to be abstract at the macroscopic level, making them play more like "games" than the 4X style of campaign. The advantage, however, is that an RTS-style campaign tends to have more combat, less bookkeeping and shorter playing time.

20.2 Modular Rules

Most of the rules in this Rulebook are **modular**. This means that you may pick and choose which rules to use and which rules to ignore. A number of the rules can be used outside a campaign, as part of a one-off battle. For example, the terrain rules (Rule 26) can be applied to a single combat that is not associated with a larger campaign. The same is true of boarding actions (Rule 24), especially if the simplified deck combat rules are used.

Although the rules on officers (Rule 23) may be used in any kind of campaign, they are best suited for solo campaigns. In fact, they can be seen as a rudimentary role-playing system that can be used (along with deck combat) as a "rules lite" space RPG.

21.0 Building Factions

Each side in a conflict is called a **faction**. Factions may be empires, species, corporations or even individuals. Most of the details that go into defining a faction, such as social structure and politics beyond the broadest strokes, fall outside the scope of **Cold Infinity**. Only the elements of a faction that have an effect on the game are modeled here.

21.1 Species Specifics

If the factions of your campaign are differentiated by species, use these rules to build the **species specifics** that govern their abilities and limitations. For factions that may include multiple species, these rules may be used to establish sub-factions, if you are willing to accept the increased complexity.

There are four primary categories that determine how a species behaves within a campaign: **physical**, **emotional**, **mental** and **spiritual**. When designing a faction, select one or more traits from the categories, or create your own options and effects. In general, it is helpful to develop factions that are reasonably well balanced (with positive and negative features), unless you are deliberately attempting to give some factions an edge.

Each category has three options, all of which are highly abstracted. You may wish to develop sub-types or alternatives at the expense of simplicity.

21.1.1 Physical Features

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21.1.1.1 Humanoid Baseline

There are no special features associated with the **humanoid baseline** species type. The baseline assumes that the species breathes oxygen and lives on land, on planets with a gravity similar to that of Earth. Humans are only one form of this species type; most alien species from TV and film also fit into the baseline.

21.1.1.2 Alternate Ecology

Although non-humanoid species can be found in myriad forms, for the purposes of **Cold Infinity**, the effects are straightforward. When designing an alternate ecology faction, select one orbital body type (see Rule 27.1.3.1) as the faction's preferred type. When rolling for Population growth (Rule 27.2.2) on an orbital body of that type, the Population increases on any roll of 1 or 2. The faction may not increase beyond a Population of 1 on any other orbital body type.

21.1.1.3 Artificial Life form

Artificial life can take many forms (robotic, android, disembodied artificial intelligence, and so on), but all forms share two primary attributes that distinguish them from the other two types: they lack emotion, and they are uncreative. (For the purposes of **Cold Infinity**, any artificial life faction that possesses emotion or creativity should be treated as humanoid baseline or alternate ecology.)

Artificial life factions ignore morale effects (Rule 23.1). However, the total RP accumulation per turn for an artificial life faction is reduced by 20% (rounded down).

21.1.2 Emotional Features

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21.1.2.1 Aggressive

21.1.2.2 Passive

21.1.2.3 Balanced

21.1.3 Mental Features

21.1.3.1 Individualist

21.1.3.2 Cooperative

21.1.3.3 Hive Mind

21.1.3.4 Automaton

21.1.4 Spiritual Features

21.1.4.1 Scientific

The total RP accumulation per turn for a **scientific** species is increased by 10% (rounded up). At the same time, however, the total RU accumulation per turn on any orbital body that has an academy is reduced by 10% (rounded down).

21.1.4.2 Neutral

Neutral species have no advantages or disadvantages; their religious lives are balanced with their scientific endeavors.

21.1.4.3 Religious

The manned units of religious species have a default morale Rating of 15 (Rule 23.1.1). However, the total RP accumulation per turn for a religious faction is reduced by 10% (rounded down).

21.2 Sociopolitical Systems

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21.2.1 Democracy

Democratic factions are susceptible to war fatigue, but have a much higher work force participation. At the end of any Strategic Turn during which at least 10,000 CP worth of combat-capable starships and small vessels have been produced by the faction, roll 1d10. On a roll of 1, the faction must reduce its total fleet size by 10,000 CP.

For purposes of RU generation (see Rule 27.4), the Population of every orbital body owned by the faction is increased by 25% (rounded down). This increase *only* applies to generating Resource Units. It does not affect the actual Populations.

21.2.2 Oligarchy

Oligarchies are governments controlled by a small number of elites (the wealthy, the technocrats, the landed aristocracy, and so on). For the purposes of **Cold Infinity**, oligarchies are the most stable forms of government, and have neither benefits nor detriments associated with them.

21.2.3 Autocracy

Autocratic factions are controlled by a single individual (monarch, dictator, strong man). There are two kinds of autocracy: **benevolent** and **despotic**. The attributes of both are described below.

The threat of an autocracy is that the autocrat will die, leaving behind either a power vacuum, an incompetent successor or an autocrat with a vastly different agenda. At the beginning of every Strategic Turn, roll 3d6. On a roll of 3 or 4, the current autocrat dies.

If the autocrat dies, roll 3d6 again. Use a –2 DRM if the deceased autocrat was benevolent, and a +2 DRM if the autocrat was despotic. On a roll of 3 to 10, the new autocrat is benevolent. On a roll of 11 to 18, the new autocrat is despotic.

If the result is below 3, the new ruler is incompetent. The faction gains none of the benefits of an autocracy for the current Strategic Turn. Roll to replace the autocrat again at the start of the next ST.

If the result is above 18, there is a power vacuum. As with incompetence, the faction gains no benefits. Roll to replace the autocrat at the start of the next ST.

On every subsequent roll to replace an incompetent autocrat or to fill a power vacuum, the DRM increases (or decreases) by 1, to a maximum of +/–6. This increase or decrease occurs even if there were intervening years of effective autocracy.

21.2.3.1 Benevolent Autocracy

Benevolent autocracies (such as those governed by beloved monarchs) inspire their subjects to great feats of loyalty. The morale Rating of every manned unit is increased by 2.

21.2.3.2 Despotic Autocracy

Despotic autocracies (dictatorships and strong man governments) gain a pool of 1,000 CP every Strategic Turn that may be used anywhere in faction-controlled territory.

21.2.4 Non-Traditional Factions

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21.2.4.1 Corporations

21.2.4.2 Raiders and Pirates

21.2.4.3 Alliances

22.0 Technology

In a campaign game, the various technologies needed to develop and build new units must be researched and paid for using **research points**. Below is a table with the full list of costs, which are described in more detail throughout this Rule:

Technology	Research Point Cost
Technology Level	500 x Current TL
Subdivided TL	50 x Current TL
Hull Type	10 x Minimum Mass
Unit Class	4 x CP Cost
Variant	1 x CP Cost
Salvage/Capture/ Purchase	2 x CP Cost
Adapted Unit Class	3 x CP Cost
Non-Weapon Limitation	1 x Percentage Reduction
Enhancement	1 x Percentage Increase
Weapon Limitation Slot	50
Weapon Technology	50
Weapon Configuration	50

22.1 Research Points

Research points are an aggregate of each faction's diverse set of academic and practical advancements. Every faction's **academies** will produce research points (Rule CXXX). These points (**RPs**) may be used to develop new ship systems, hull types and ship classes. In some campaigns, every technology must be paid for with RPs before it may be built. In others, each faction will have a set of established technologies that do not require research, though new technologies may be researched using RPs.

Once a faction has spent RPs on a given technology, every appropriate shipyard controlled by that faction (currently or in the future, including captured shipyards) may build units using that technology.

22.2 Hull Types and Unit Classes

Before a new **hull type** or **unit class** may be built, a faction must first develop the blueprints and design specifications of that hull type or unit class.

22.2.1 Hull Type Development

The available **hull types** are found on SSB2. In order to be able to design units based on a hull type, a faction must pay a number of RPs equal to 10 times the minimal Mass of that hull type. *Examples:* In order to be able to build cruisers, a faction must first pay 200 RPs to develop the hull type (Mass 20 x 10). In order to build medium shuttles, a faction must first pay 20 RP (Mass 2 x 10).

22.2.2 Unit Class Development

A **unit class** is the general blueprint and design specification of a range of ships that use the same hull type and most of the same ship systems. Typically, the name of a unit class is the name of the first unit that is built to that specification. Later units in the class have their own names, but are identifiable also by the unit class name.

Most units in a class will be identical. It is possible, however, to design **variant** units based on the original class. See Rule 22.2.3.

The RP cost of a unit class—which allows a faction to build actual units based on the class—is 4 times the CP cost of the first (original) unit. The first unit may not be built until the unit class cost has been paid.

Note that a unit class based on a certain hull type cannot be developed (or built) until the hull type has been paid for.

22.2.2.1 Variants

As indicated, most "copies" of a unit class will be identical. It is possible, however, to develop **variants** of the class, which are largely the same but have a few important differences.

A unit class variant may only differ in its weapons, shields and defensive systems, *or* in its engine, power plant, trans-light drive and thruster Ratings. It cannot, for example, vary both its weapons and its engine output. Other systems (such as hangars) may be added, changed or removed without restriction.

A variant must field the same number of weapons, shields and defensive systems as the unit class. It cannot add or remove any of these systems.

The RP cost of a variant is equal to the CP cost of the variant.

22.2.3 Cost Reduction

It is possible for a faction to cut corners and develop hull types, unit classes and variants without paying fully for the designs.

Hull Type. For a 10% reduction in hull type RP cost (rounded down), the CP cost of *any* unit based on the hull

type is increased by 1%. This CP cost increase will also affect the RP cost for unit classes and variants.

Unit Class. For a 25% reduction in unit class RP cost (rounded down), every powered system on any unit built on the class (including variants) becomes unreliable. During combat, whenever a powered system (including zero power systems) is used, roll 3d6. On a result of 5 or below, the system temporarily deactivates for a number of turns equal to the roll result. The system is immediately deactivated and does not operate on the current turn, and will not function while it is disengaged. Weapons may not begin arming until the deactivation period ends. Small vessels may not receive this RP cost reduction.

Variant. For a 50% reduction in variant RP cost (rounded down), every powered system on any unit built on the variant becomes unreliable, and deactivates on a roll result of 6 or below. Variants built on unreliable unit classes may not receive this RP cost reduction. Small vessels may not receive this RP cost reduction.

22.2.4 Salvaged, Purchased and Captured Units

Units that have been salvaged or captured from enemy factions, or purchased from other factions, may be reverse engineered in order to make them available as unit classes.

The relevant hull type for any captured unit must already be available to the faction that is reverse engineering the unit. All systems fielded by the unit must be available to the faction as well. Once these prerequisites have been fulfilled, a new unit class may be built from the unit for 2 times its CP cost (half the cost of a regular unit class).

If a faction does not have access to one or more of the systems fielded by the unit, the faction may create an **adapted unit class** based on that unit. To do this, the player must replace every unavailable system with an equivalent that is available to the faction. An adapted unit class has an RP cost of 3 times the CP cost of the modified unit. An adapted unit class is identical to a regular unit class in all other ways.

Adapted unit classes may not be developed based on hull types to which the faction does not already have access.

22.3 Technology Trees

22.3.1 Technology Levels

At the beginning of a homeworld campaign, all factions will begin at **Technology Level** 1. At the beginning of an empire campaign (or a solo campaign), all factions will begin at the Technology Level assigned to them. As the campaign progresses, factions will be able to improve their technological capabilities and achieve higher Tech Levels.

Factions may not build systems that require a Tech Level greater than their own. If a faction salvages, captures or purchases a unit that contains systems with a higher Tech Level, those systems may be used on that unit only. (An adapted unit class must be developed in order to build more units of the same design.)

In order for a faction to reach the next Technology Level, it must spend Research Points equal to 500 times the faction's *current* level. *Example:* A faction may move from Technology Level 3 to Technology Level 4 by spending 30,000 RP.

22.3.1.1 Subdivided Technology Levels (Optional Rule)

Under the standard rules, factions will reach new Technology Levels in all technologies at once. The subdivided Technology Levels rule allows factions to improve in different areas at different rates. Each Technology Level costs 50 RP times the system type's *current* level for each system type:

- Shields
- Sectional Armor
- Sensors, ESS, Specialized Sensors
- Hangars and Holds
- Bridges
- Repair Systems
- Trans-Light Drives
- Power Plants
- Engines and Thrusters
- Weapons (all types)

22.3.2 Limitations and Enhancements

During the initial stages of a homeworld campaign, ship systems will not be able to employ enhancements and will suffer from one or more required limitations. Access to new enhancements may be paid for with RPs. Removal of limitation requirements may also be paid for with RPs.

While a system is required to use a limitation, it cannot gain the CP cost reduction benefit from that limitation. Once the limitation has been bought off with RPs, any future use of the limitation will provide the CP cost reduction benefit. Required limitations do not count towards a weapon's enhancement limit.

The RP cost to remove a specific limitation requirement is equal to its percentage CP reduction. Thus, the Limited Circuits power plant limitation (–30%) costs 30 RP to remove. The RP cost to make an enhancement available is equal to its percentage CP increase.

Enhancements that come in incremental levels may be paid for incrementally.

22.3.2.1 Power Plants

Until paid off, the Limited Circuits limitation is required for all power plants. The Overheating limitation is required for all reactors.

22.3.2.2 Engines

Until paid off, the Limited Fuel and Short Fuel Lines limitations are required for all engines.

22.3.2.3 Trans-Light Drives

Until paid off, the Terrain Requirement limitation is required for all trans-light drives. The required terrain must be the same for all trans-light drives constructed by the faction.

22.3.2.4 Weapon Systems

Until paid off, every weapon system built by the faction must include at least two configuration limitations and two technology limitations (which do not provide CP cost reduction). If these limitations include levels (such as the Wave Degradation limitation), the greatest level (that is, the most limiting) must be used.

One limitation "slot" may be bought off for 50 RP. (Thus, to remove the limitation requirement entirely costs 200 RP.)

It is not necessary to pay off specific limitations. Specific enhancements must be paid for normally.

22.3.2.5 Technology Levels

Limitations are bought off (and enhancements are bought) only for the faction's current Technology Level. Once a faction has achieved the next Technology Level, limitations and enhancements must be researched for all systems that require the new Technology Level.

22.3.3 Weapons, Configurations and Technologies

In a Homeworld campaign, factions will begin with only a single weapon technology (usually Matter) and configuration (usually Burst) available to them. In other campaigns, factions may have a subset of all possible technologies.

To develop a new technology or configuration, a faction must pay 50 RP. Technologies and configurations may be purchased before the faction has reached the necessary Technology Level, but they may not be used until that Technology Level is reached.

Individual weapon systems must be researched as well. The cost in RP is identical to the CP cost for construction.

22.3.4 Other Systems

In order to build other types of ship systems, a faction must first research the technology. Any systems not on the list are available without research.

System	RP Cost
Anti-Missile Rocket Systems	2 RP
Automatic Repair Systems	10 RP
Batteries and System Batteries	1 RP
Breach Cutters	5 RP
Capacitors	5 RP
Chaff and Flares	2 RP
Collector Panels	2 CP
Electronic Support Systems	10 RP
EW Detectors	5 RP
External Launchers	1 RP
Hangar Launch Tubes	1 RP
Heat Sinks and Radiators	1 RP
Masking Sensors	5 RP
Solar Sails	1 RP
Specialized Armor (each type)	10 RP
Stealth Capability	25 RP
Teleporter Systems	50 RP
Trans-Light Drives	100 RP

23.0 Officers

Academies are used to train high quality officers and crew (Rule XXX). Most of these officers and crew remain unnamed and unknown, but some become known as "heroes" within their fleets.

A hero officer is a named individual who has been assigned to a particular unit and provides special effects and attributes to that unit during combat.

23.1 Morale

Morale is a measure of how resistant a unit's crew members are to the desire to flee battle. The default morale Rating of every manned unit is 10. This can be affected by various factors.

At certain points during a combat, it may be necessary to make a morale check. To do this, roll 1d10. If the result is less than the unit's current morale Rating, reduce the morale Rating by 1. There are no other effects. If the result is greater than the unit's current morale Rating, the morale check fails, and different effects occur.

Starships. Perform a morale check every time a system or section is destroyed. If the morale check fails, the starship is **in retreat**. Once a starship is in retreat, it must attempt to exit battle as quickly as possible, into friendly territory. It may attack enemy units at will, but it must move along a vector that will cause it to exit combat.

Small vessel groups. Perform a morale check every time one of the vessels in the group is destroyed or disabled. If the morale check fails, the entire group is in disarray and must return to its home hangar as quickly as possible.

Manned stationary structures. Perform a morale check every time a system or section is destroyed. If the morale check fails, the unit is considered in surrender. The unit will dedicate all of its available weapons to to Defensive Fire and will not fire offensively against enemy targets. It will broadcast a surrender to the opposing faction(s), a reply to which is at the enemy's discretion.

23.1.1 Morale Adjustments

Every hero officer present increases a unit's morale Rating by 1. **Chaplain** officers (Rule 23.2.1) provide an additional +1 to the Rating (a total of +2).

The default Rating of a religious species is 15. This can be adjusted by the presence of hero officers, including chaplains.

23.2 Hero Officers

Every academy can produce one hero officer per **Strategic Turn**. On the following Strategic Turn, the faction may assign (or reassign) hero officers to any active manned unit within its fleets.

Starships and manned stationary structures may only have one hero officer at a time. If a hero officer is being assigned to a unit that already has a hero officer, the existing officer must be transferred to another unit.

Hero officers assigned to small vessels are berthed aboard the units carrying their vessels. Small vessel hero officers are not included in the above limit. Small vessel hero officers are assigned to hangars, and may enter any small vessel that launches from their hangar. If a small vessel operated by a hero officer is destroyed, the hero officer is killed.

Hero officers are given **roles** when they are first assigned to a unit. They may not change roles once they have been assigned, even if they are transferred to another unit.

23.2.1 Starship Roles

Assault Specialist. Assault Specialists provide a +1 DRM to any attempts to establish a beachhead by marine teams originating on the unit where the Specialist is deployed.

Chaplain. Chaplains provide +1 to the morale Rating of the unit to which they are assigned. This is in addition to the +1 provided by the presence of a hero officer.

Electronic Warfare Specialist. EW Specialists increase the EW shroud range to 1 point per 12 hexes.

Engine Technician. Engine Technicians decrease the engine enrichment Ratings of all engines on their units to 1.

Fire Brigade Specialist. ***

Flight Deck Technician. Flight Deck Technicians increase the number of operations available to each hangar, external launcher and HLT on the unit by 1.

Power Technician. Power Technicians increase the Rating of one power plant by 10% (rounded up).

Programmer.

Propagandist.

Quartermaster. Quartermasters increase the size of every on board missile rack by 10% (rounded up). Extra missiles must still be purchased normally.

Sensor Specialist. Sensor Specialists decrease all sensor boost Ratings on their units to 1.

Tactician. Tacticians provide their units with the ability to perform a snap maneuver (Rule XXX) once every five turns. This snap maneuver is performed *before* all small vessel snap maneuvers.

Trans-Light Specialist. Trans-Light Specialists are able to accelerate a drive's power accumulation. Every turn, a

trans-light drive may accumulate two points of power instead of one.

Weapon Technician. Weapon Technicians increase the accuracy Ratings of all on board weapons by +1. They do not affect the accuracy sign.

23.2.2 Stationary Structure Roles

All of the roles available to starship hero officers are available to stationary structure hero officers *except* Engine Technician, Tactician and Trans-Light Specialist.

23.2.3 Small Vessel Roles

Ace. ***

Acrobat. Acrobat pilots do not pay thrust points to perform Evasive Maneuvers. (They are still limited by the number of EM points available.)

Barnstormer.

Tailgunner.

23.3 Roleplaying Options

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24.0 Boarding Actions

Boarding actions can be attempted by any marine-loaded unit that is within **boarding contact distance** of an enemy unit. The boarding contact distance of a given unit will depend on the kind and level of technology that it uses to initiate boarding actions, described in Rule 24.2.

24.1 Marines

Marine teams are specialized troops trained to board enemy ships for disabling or capture. They are trained at **academies** (Rule 27.4.5) and billeted in cargo holds (Rule 27.5.3).

At the start of combat, every marine team aboard a unit must be assigned to a specific mission that cannot be changed during the course of battle. These missions determine how and when the marines can engage the enemy. The list of possible missions is as follows:

- Breaching Shuttle
- Assault Shuttle
- Teleporter
- Direct Assault (Linked Ship Transfers)
- Boarding Torpedo
- Defensive Positions

Marines assigned to shuttles or torpedoes do not have to be assigned to specific shuttles or torpedoes until launch time.

24.1.1 Troop Quality Rating

Every marine team has a Troop Quality Rating equal to the Level of the academy at which it was trained. If a marine team successfully captures or disables an enemy unit, its TQ Rating is increased by 1.

24.1.1.1 Attrition

If a team's TQ Rating drops to zero for any reason, the team is eliminated.

24.1.2 Specialist Marines

Any marine team may be converted to a **specialist team** at half its TQ Rating, rounded down. Marine teams with a TQ Rating of 1 may not be converted to specialists. Specialist teams may not be converted back to regular marines.

24.1.1.1 Commando

When a **commando** unit attempts to establish a beachhead or engage in deck combat, treat its TQ Rating as double its current rating, and add a +2 DRM to the roll.

Commando units in defensive positions double their current rating but do not add the DRM.

The TQ Rating is not doubled for purposes of attrition (Rule 24.1.1.1).

24.1.1.2 Mechanized

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24.1.1.3 Stealth

24.1.1.4 Ground Assault

24.1.1.5 Barricade Team

A **barricade team** is a defensive marine team only; it cannot participate in attacks. When engaged in deck combat (including repulsion of a beachhead attempt), treat its TQ Rating as double its current rating, and add a +4 DRM to the roll.

The TQ Rating is not doubled for purposes of attrition (Rule 24.1.1.1).

24.2 Transfer

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24.2.1 Breaching Shuttles

Breaching shuttles are shuttles equipped with **breach cutter** systems (see Rule XXX). Breach cutters are mounted on a specific Standard firing arc, specified when the shuttle is built. A number of marine units equal to the Mass of the shuttle may be boarded onto the shuttle.

The boarding contact distance of a breaching shuttle is zero hexes. Breaching shuttles may only attempt to breach starships and stationary structures. To make the attempt, the breaching shuttle must match its target's vector (speed and direction of travel) and be in its target's hex and layer when all movement is completed for the turn. The shuttle must enter the target's hex through the firing arc of the breach cutter.

Resolve the attempt to breach as a ram at the appropriate point during the Boarding Actions Step (see Rule XXX and the Turn Sequence Outline). Do not use the ram resolution chart; instead, on a roll below 6 the breaching shuttle fails to attach. On a roll of 6 or above, the breaching shuttle successfully attaches to its target.

During the Boarding Actions Step of the *subsequent* turn, the marines on board the attached breaching shuttle may attempt to enter the target unit.

24.2.1.1 Breaching

In order to breach the outer hull of the target ship, a breaching shuttle must attempt to cut through the surface after it has attached. If a breaching shuttle has failed to attach to its target, it cannot make a cutting attempt.

A breach cutter may not cut through any hull structure armor that has an armor Rating greater than twice the cutter's Tech Level. Special armor effects (such as specialized armor) have no effect on breach cutters. If the armor Rating is less than twice the cutter's Tech Level, the breach cutter is successful. On the turn following the shuttle's attachment, the cutter completes its task and the shuttle's marines may attempt to establish a **beachhead** (Rule 24.2.6).

24.2.2 Assault Shuttles

Assault shuttles use a target's hangars to gain access to the unit. The boarding contact distance of an assault shuttle is zero hexes. To make the attempt, the assault shuttle must match its target's vector (speed and direction of travel) and be in its target's hex and layer when all movement is completed for the turn. The shuttle must enter the target's hex through the firing arc of the hangar the shuttle intends to assault.

In order for an assault shuttle to land, it must first breach the hangar bay door. Once the shuttle is in the same hex as the target, it must make a single called shot attack with a direct fire weapon in burst or pulse configuration against the hangar system during the Boarding Actions Step (before normal weapons fire). The called shot penalty is *not* applied for this attack, and the target may not use Defensive Fire.

If the attack is successful, do not roll for damage. Instead, the assault shuttle lands inside the hangar. On the next turn, the marine team may attempt to establish a beachhead as in Rule 24.2.6.

24.2.3 Teleporters

The boarding contact distance of a teleporter system depends on its Rating. The number of marine teams that may be transferred using a teleporter on each turn depends on the number of operations the system can perform.

Standard teleporter systems cannot penetrate active shields, either on the teleporting unit or on the target. **Shield-penetrating teleporters** can penetrate active shields.

Teleporters with a Rating of at least 3 can also be used to transfer teams to the surface of a planetary body (asteroid or larger).

Teams that are transferred using a teleporter are not required to establish a beachhead. They may engage in deck combat immediately (on the following turn).

24.2.4 Linked Ship Transfers

Linked ship transfers are transfers during which the two starships involved are attached directly to one another without being docked or landed.

The boarding contact distance of all linked ship transfers is zero hexes.

24.2.4.1 Voluntary Transfers

Voluntary linked ship transfers are conducted with the use of a **transfer boom** that extends between airlocks on both ships. Frequently there are other stabilizing connections made between the two ships to prevent shearing.

To initiate a voluntary transfer, both ships must be in the same hex and traveling with the same vector (Speed and direction of travel).

Once a voluntary transfer has been initiated, neither ship may fire weapons until the transfer is completed, and neither ship may perform maneuvers or accelerations/decelerations.

24.2.4.2 Entanglement Transfers

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24.2.4.3 Grappling

24.2.4.4 Derelict and Disabled Transfers

Starships may link up with derelict or disabled ships in order to capture them or restore them to service. Initiate a transfer in the manner of a voluntary transfer.

Note that the loss of engines/thrusters or the ship's bridge does not mean that there will be no resistance. If there is resistance aboard the target ship, resolve it according to the rules for breaching shuttles (24.2.1).

24.2.5 Boarding Torpedoes

24.2.6 Beachheads

If the target unit does not have marines in defensive positions (or if, using the deck combat rules in Rule 25.0, the target unit does not have marines in defensive positions in the same section as the breach), boarding marines automatically establish a **beachhead** and may engage in deck combat on the following turn (as per Rule 24.3 or Rule 25.0).

If the target unit does have marines appropriately positioned, both sides roll 3d6 and add the Troop Quality Rating and the faction's Tech Level as DRM. If the defender has more than one team in defensive positions, choose the team with the highest TQ Rating. If the defender's result is equal to or greater than the attacker's, the attacking marines are beaten back and their TQ Rating is reduced by 1.

If the attacker's result is greater than the defender's, the attacking marines establish a beachhead and may engage in deck combat on the following turn (Rule 24.3 or Rule 25.0).

24.2.6.1 Breaching Shuttles

If a boarding team is beaten back to a breaching shuttle, the shuttle automatically detaches from the target unit. The breaching shuttle may attempt to attach again on the next turn.

24.2.6.1 Assault Shuttles

If an assault shuttle marine team fails to establish a beachhead, the shuttle is not required to leave. It may attempt another beachhead on the next turn.

24.2.6.2 Entanglement Transfers

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24.2.6.3 Derelict and Disabled Transfers

24.2.6.4 Boarding Torpedoes

If a torpedo marine team fails to establish a beachhead, the team is eliminated regardless of its TQ Rating.

24.3 Simplified Deck Combat

A more extensive deck combat system is described in Rule 25. The simplified deck combat system is intended to resolve boarding actions quickly, but with fewer options and detail.

24.3.1 Priority Assignments

25.0 Deck Combat

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26.0 Terrain and Obstacles

***

26.1 Planets

For the most part, planets will not appear on combat maps. A single planet is many orders of magnitude larger than the largest stationary structure (which occupies a single hex).

Very rarely, combat may occur close to a planet's atmosphere. In such cases, designate a single row of hexes at one edge of the battle map to be the planet's surface. One row of hexes inward from that surface row is the planet's atmosphere.

Units that are not capable of atmospheric flight will burn up and be destroyed if they spend more than two turns within the atmosphere row. Any unit that enters the planet's surface row is immediately destroyed, unless it is attempting a landing procedure.

All units are sufficiently capable of maintaining orbit around a planet that no special rules are required to address the effects of gravity.

26.1.1 Landing Procedures

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26.1.1.1 Shuttles

26.1.1.2 Starships

26.1.1.3 Teleporters

26.2 Asteroids

Contrary to popular cinematic belief, asteroid belts are extremely low density. Millions of kilometers separate asteroids from one another, making it highly unlikely that more than one asteroid will appear on the map of any single combat.

Most asteroids of consequence are between 1 and 200 kilometers in (rough) diameter. The number of hexes that an asteroid will occupy depends on the **map scale** (Rule A1.4). The default assumption is that a hex is 1km across, which would mean that the smallest consequential asteroids occupy an entire hex.

26.2.1 Collision

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26.2.2 Landing Procedures

26.2.2.1 Shuttles

27.0 4X Campaigns

***

27.1 Building the Universe

The map of any campaign will be laid out on a three-dimensional grid. Unlike the combat map, the campaign map uses squares, not hexes. Every star system on the map will be positioned using a coordinate system (X,Y,Z) where X and Y are on the map plane and Z is distance from the map plane.

Calculating distances between two star systems may take some getting used to, but a table is provided at the end of the book that will make it somewhat easier. (See Rule XXX on inter-system movement for the uses of calculated star-to-star distances.) To determine the distance between two points on the campaign map, complete the following steps:

- Square the difference between the X values.
- Square the difference between the Y values.
- Square the difference between the Z values.
- Sum these squares.
- Find the square root of the sum, then round up.

The result is the game distance between stars. The table at the end of the book lists the squares of all numbers from 1 to 100, and the square roots of all number ranges from 0 to 30,000 (which will handle the distance between stars at 0,0,0 and 100,100,100).

The first step in building the "universe" of a campaign is to decide how large it will be. The largest campaign should not be any greater than 100 x 100 x 100, as that has the potential of housing one million stars. A manageable starting campaign will be 10 x 10 x 10, which permits up to one thousand stars. If the campaign is to have a low-density map (with few stars), a map closer to 100 x 100 x 100 may be workable.

Once the map size has been determined, stars must be placed on the map. Decide how many stars will be present in the game. It is not recommended to have fewer than twenty stars or more than one thousand. (One thousand stars will likely result in an extremely long campaign—measured possibly in months, if not years.)

There are three ways to select the map's star layout. The first method is to assign each location by hand, with placement (X,Y,Z coordinates) chosen by the players.

The second method is to randomly select the X, Y and Z coordinates of each star. To do this with a 10 x 10 x 10 map, roll 1d10 three times for each star. On a 100 x 100 x 100 map, roll 1d100 (or two 1d10s, multiplying one die by

10 and then summing the two dice) three times for each star. On a map of a different size, either use a die close to the size and re-roll superfluous rolls (such as using a d20 for a 16 x 16 x 16 map and re-rolling any result over 16) or use some other method of randomization, such as a computer program.

The third method is to make a random selection with **weighting.** This method will produce a campaign map in which the bulk of the stars are close to the center, with the remaining stars scattered around the edges of the map. This produces the most "realistic" map and is the suggested method. For a 10 x 10 x 10 map, roll 2d6–2 three times per star, and re-roll any result of zero. Other options include:

- **15 x 15 x 15 map**: Roll 3d6–3, re-roll any result of zero
- **20 x 20 x 20 map**: Roll 2d10–1
- **25 x 25 x 25 map**: Roll 4d6–1
- **30 x 30 x 30 map**: Roll 3d10–1 or 5d6–2
- **35 x 35 x 35 map**: Roll 3d10+2 or 6d6–3
- **40 x 40 x 40 map**: Roll 4d10–2 or 7d6–3
- **50 x 50 x 50 map**: Roll 5d10–3 or 8d6–3
- **60 x 60 x 60 map**: Roll 6d10–3 or 10d6–5
- **70 x 70 x 70 map**: Roll 7d10–4 or 11d6–3
- **80 x 80 x 80 map**: Roll 8d10–4 or 12d6–2
- **90 x 90 x 90 map**: Roll 9d10–5 or 15d6–7
- **100 x 100 x 100 map**: Roll 10d10–5 or 16d6–6

In some cases, the results will leave sections of the map unpopulated (near the edges), but this is an acceptable distribution result. The more dice that are rolled for each coordinate, the more likely the star will be near the center of the map.

If any result is duplicated (i.e., the X, Y and Z coordinates are all the same), discard the result and roll again. With a large campaign map this is unlikely to occur.

Note that the above star placement system assumes that the campaign is being played in a three-dimensional space. If all players agree to use two-dimensional space instead, only X and Y coordinates are used, and the map may be larger on each side without overly increasing complexity. (Finding the distances between stars on a two-dimensional map is the same as the standard method, but the Z distance is ignored.)

Once all of the stars have been placed, the campaign designer or the players should locate the starting faction homeworlds. This may be determined randomly (perhaps by adding one new star for each faction) or by manual selection. If the campaign is to be an empire campaign, players should then take turns selecting nearby stars as their possessions.

27.1.1 Stellar Cartography

((drawing the map))***

27.1.2 Systems

After star placement, each star must be checked to determine whether or not **orbital bodies** are present. An orbital body may be a **solid surface planet**, **gas giant** or **asteroid belt**. The campaign designer should decide on a **system density** for the campaign map, as a number from 1 (low density) to 10 (high density). Then roll 1d10 for each star. If the roll is equal to or below the system density, the star will have at least one orbital body. If players have already selected homeworlds and/or faction possessions, those stars should be assumed to possess orbital bodies.

For each star with orbital bodies, roll 1d6 to determine how many such bodies the star possesses.

27.1.3 Orbital Bodies

Every system that has orbital bodies will have at least one gas giant. (If the system has only one orbital body, that body will be a gas giant.) For each orbital body after the first, roll 1d6. On a roll of 1, 2 or 3, the body is a gas giant. On a roll of 4 or 5, the body is an asteroid belt. On a roll of 6, the body is a solid surface planet.

Orbital bodies are arranged in order, beginning with the body nearest the system's star. It is important for purposes of intra-system travel to know which bodies are "adjacent" to one another, and which orbital body is at the outermost edge of the system.

27.1.3.1 Orbital Body Types

The ability of an orbital body to provide resources and sustain a population depends on its type. Once an orbital body reaches its maximum Population and/or Resource level, it cannot increase further in that area.

Solid Surface Planet. To determine the maximum Population of a solid surface planet, roll 1d100. Roll 1d50 (1d100 with 51-100 being treated as 1-50) to determine the maximum allowed Resource level.

Gas Giant. The maximum Population of a gas giant is determined by rolling 1d20. The maximum Resource level is the result of rolling 1d50.

Asteroid Belt. Roll 1d10 to determine the maximum Population of an asteroid belt. Roll 1d100 to determine the maximum Resource level.

27.1.3.2 Populations

***

27.1.3.3 Resources

27.1.4 Travel Corridors

27.1.4.1 Trans-Light Gates

27.1.5 Extra-Dimensional Space

27.2 Homeworlds and Colonies

27.2.1 Establishing Colonies

27.2.2 Population Growth

At the beginning of every Strategic Turn (Rule 27.3.1), an established colony or homeworld may increase its population. For every point of Population on the orbital body, roll 1d10. If any of the results is a 1, the Population increases by 1.

The total Population may never exceed the maximum Population as determined in Rule 27.1.3.1. The Population may never increase by more than 1 per turn, regardless of how many rolls were successful.

Each **farm** on the orbital body (Rule XXX) increases the success range by 1. Thus, if an orbital body has one farm, its Population will increase on any roll of 1 or 2.

27.2.3 Orbital Structures

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27.2.4 Ground Fortifications

27.3 Time Scales

There are four time scales in a campaign game. The largest of these is the **Strategic Turn** (ST). One ST is equal to one year within the campaign universe. Below the ST is the **Operational Turn** (OT). There are twelve Operational Turns in a Strategic Turn—that is, each OT lasts one month. Next is the **Tactical Turn** (TT), which lasts three days. There are 10 Tactical Turns in an Operational Turn. Finally, there is the **Combat Turn** (CT). There can be any number of Combat Turns in a Tactical Turn.

Each time scale has a number of actions that may be taken at the beginning of the turn. After these actions are taken by all players, the next smaller time scale is entered.

At the beginning of a campaign, therefore, all players take their actions in the first Strategic Turn (Rule 8.1.6.1). Once all players have completed their actions, the campaign continues through twelve Operational Turns. At the beginning of each Operational Turn, all players take their OT actions (Rule 8.1.6.2). Once a single OT is completed, the campaign continues through ten Tactical Turns. As each TT ends, any combat engagements that were initiated during the TT are entered as Combat Turns.

After all combats are completed, the campaign continues through the next Tactical Turn. After ten Tactical Turns are completed, the campaign continues through the next Operational Turn. After twelve Operational Turns are completed, the campaign continues through the next Strategic Turn.

Therefore the flow of a single Strategic Turn is as follows:

- Strategic Turn Begins
  - First OT
    - First TT
      - All Combat Turns
    - Second TT
      - All Combat Turns
    - Third TT
      - All Combat Turns
    - etc. (total of 10 TTs)
  - Second OT
    - First TT
      - All Combat Turns
    - Second TT
      - All Combat Turns
    - etc.
  - Third OT
    - First TT
      - All Combat Turns
    - etc.
  - etc. (total of 12 OTs)
- Next Strategic Turn Begins

Note that the actions specific to a given time scale are taken at the *beginning* of that turn. So, all of the actions available at the Strategic Turn scale must be completed before the first Operational Turn is begun.

27.3.1 Strategic Turn

((Resources accumulate))
((Convert RU to CP))
((Construction))
((Research))
((Population growth))

27.3.2 Operational Turn

((Abstraction: Bulk resource transfer))
((Diplomacy))
((Espionage))

27.3.4 Tactical Turn

((Abstraction: Regular resource transfer))

27.3.5 Combat Turn

A Combat Turn is the length of time required for a single battle or encounter. There can be any number of Combat Turns in a Tactical Turn. At the end of every TT, each encounter that has been entered by the players is resolved in the order in which they were entered.

Once an encounter has been resolved, either by victory for one side or the retreat of both sides, the next encounter is entered. Once all of the encounters have been completed, the current Tactical Turn ends.

27.3.6 Turn Order

Players take their turns (at each scale) in an order determined by the total number of *available* Research Points held by each faction, beginning with the faction having the least number of RPs available.

Note that the turn order is not determined by the total RPs *owned* by a faction (that is, used plus unused points). Only count the number of RPs that the faction has *not yet used*. This means that factions that do not use their RPs as quickly will have the advantage of going later in any given turn.

In the event of a tie of available RPs, determine randomly which of the factions goes first.

27.4 Production

In order to build anything, a faction will need to spend **Resource Units** (RU) to create **construction points** that are, in turn, used to build all units (ships, mines, farms, etc.).

Resource Units are generated in any system in which a faction has a presence. These units may be transported from one system to another using trade routes (Rule XXX).

Although individual orbital bodies produce these units, the system as a whole keeps the total. All RUs generated within a system or transported to a system may be used by any production facility within that system.

27.4.1 Resource Units

Resource Units are generated by the mines located on orbital bodies (Rule 27.4.3) and by the orbital bodies' current Populations. The total number of RUs that an orbital body produces each year (every Strategic Turn) is equal to its current Resource level plus its Population level. Resource Units are accumulated at the beginning of each Strategic Turn.

27.4.2 Construction Points

1 RU may be used to create 100 construction points. Construction points may not be turned back into resources. Construction points may only be used in the system where they were created. Unlike resources, construction points may not be transported via trade routes.

Construction points may be used to build production facilities (mines, farms, factories, shipyards, fabricators, academies), stationary structures and ships.

27.4.3 Mines

To build a mine, a faction must pay 1,000 CP and 1 Population point from the orbital body on which the mine is to be established. Mines may not be built on orbital bodies with a Population of 1 (as that would reduce the Population to 0).

Each mine adds 1 to the Resource level of the orbital body.

27.4.4 Farms

To build a farm, a faction must pay 1,000 CP and 1 Population point from the orbital body on which the farm is to be established. Farms may not be built on orbital bodies with a Population of 1.

Each farm increases the chances of population growth every turn (see Rule 27.2.2).

27.4.5 Academies

Academies serve four purposes: they produce **research points** (Rule 22.1), **officers** (Rule 23), **marine teams** (Rule 24.1) and **spies** (Rule 27.11.1).

An academy costs 1,000 CP to build. Only one academy may be placed on each orbital body.

27.4.5.1 Research Points

Every academy that a faction owns automatically produces 1 RP per Strategic Turn, for each academy level.

27.4.5.2 Officers and Marines

An academy can produce one hero officer or one marine team Operational Turn (12 each year), for each academy level. Players are not required to specify which type has been created until it is assigned to a unit.

27.4.5.3 Academy Level

Academies may be built up to level 20. Each additional level costs 1,000 CP per level. Thus, increasing an academy from level 1 to level 2 costs 2,000 CP, and increasing a level 1 academy up to level 3 costs 5,000 CP (2,000 + 3,000). An academy may only be raised by 2 levels on any given Strategic Turn.

27.4.6 Shipyards

Factions may build up to three **shipyards** per orbital body. One shipyard costs 10,000 CP.

Shipyards can be used to build any unit with a Mass less than 60: small vessels, starships, satellites and weapon platforms. A single shipyard can build a total of 300 Mass per Strategic Turn.

Units are constructed at the beginning of a Strategic Turn, when the Construction Points are allocated. It is possible to assign CP to a shipyard without building any units. The assigned CP remain in a pool available to that shipyard until they are used. They may not be transferred to another shipyard.

27.4.7 Fabricators

Factions may build one **fabricator** per orbital body. One fabricator costs 10,000 CP.

Fabricators are used to build units larger than a Mass of 60, including Artificial Trans-Light Gates. Stationary units that are built by a fabricator may not be moved from the orbit in which the fabricator is located. Mobile bases and hyper-dreadnoughts are not limited in this respect.

Units are constructed at the beginning of a Strategic Turn, when the Construction Points are allocated. It is possible to assign CP to a fabricator without building any units. The assigned CP remain in a pool available to that fabricator until they are used. They may not be transferred to another fabricator.

27.4.8 Unit Repair

((50% of CP cost for building))

27.5 Galactic Movement

27.5.1 Intra-System

Once per Tactical Turn, a ship may travel between adjacent orbital bodies. Intra-system movement does not require a trans-light drive or an ATLG.

27.5.2 Inter-System

Once per Tactical Turn, a ship may travel at trans-light speed. Inter-system movement requires either a trans-light drive or an ATLG. Per Tactical Turn, ship may travel up to a number of light-years equal to its drive's trans-light speed.

A ship that has not yet reached another system is considered to be **in transit** and cannot interact with other units in normal space.

A ship may originate its trans-light journey at any viable point, but will arrive at the outermost orbital body of its destination unless there is a compatible ATLG available at another orbital body. A ship using a hyper or shift drive may return to normal space via a hyper ATLG; a ship using a snap drive may arrive via a snap ATLG.

See Rule 27.5.4 for more detail on ATLGs.

27.5.2.1 Hyper and Shift Drives

Once a ship has entered the parallel dimension accessible via a hyper or shift drive (such as hyperspace), it may remain in that dimension indefinitely. If a ship has not arrived at its destination at the end of a Tactical Turn, the ship is not required to re-enter normal space at the end of that TT. It may instead elect to remain in the parallel dimension and either keep station or continue traveling on a subsequent Tactical Turn.

While a ship is in the parallel dimension, it may be encountered by other ships (also in the parallel dimension) traveling in the same system. See Rule 27.10.2.

27.5.2.2 Snap Drives

If a ship using a snap drive is not able to reach its destination on the current Tactical Turn, it must remain in transit until the next TT, at which time it may continue to travel. A ship in transit using a snap drive cannot be encountered by other units.

27.5.2.3 Warp Drives

As with hyper and shift drives, warp drives allow a ship to remain in warp rather than re-enter normal space between systems.

27.5.3 Transporting Materials and Personnel

A single cargo bay (1 point of structure) can carry 5 Resource Units, 2 officers, 2 spies or 1 marine team. A single bay cannot carry more than one kind of cargo, but an entire cargo hold may carry any mixture of cargoes.

A set of 50 cargo bays may carry a single colonist group (see Rule 27.7.2). These cargo bays must be contiguous (i.e., part of a single hold).

Loading and unloading of cargo is treated as an automatic action when the cargo vessel departs or arrives, unless it does so in the midst of combat.

If a cargo ship is captured, its non-personnel contents become the property of the conquering faction. Officers, spies, marines and colonists become hostages or prisoners of war, and may be exchanged, imprisoned or executed, at the faction's discretion.

27.5.3.1 Trade Route Abstraction

Instead of using transport and passenger ships to carry RUs, players may wish to use an abstraction of the concept of trade routes. Once every Tactical Turn, RUs from *one*

system may be transferred (in full or in part) to the nearest friendly system. Once every Operational Turn, RUs from *every* system may be transferred (in full or in part) to the nearest friendly system.

27.5.3.2 Disrupting Trade Routes

27.5.4 ATLG Control

Artificial trans-light gates are initially controlled by the faction that created them. That faction may control access to the ATLG, preventing any undesired ships from traveling through it.

ATLGs may be captured or reprogrammed, however.

27.5.4.1 Capturing an ATLG

27.5.4.2 Reprogramming an ATLG

27.6 Fleets and Task Forces

27.6.1 Fleets

27.6.2 Task Forces

27.7 Exploration and Colonization

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27.7.1 Entering New Systems

27.7.2 Colonizing Orbital Bodies

In order to colonize an orbital body, it is necessary to transport at least one **colonist group** to that body. Once a ship has entered orbit around the orbital body, it must remain there for one Operational Turn to unload and support the colonists as they set up base.

If the ship is forced to leave or is destroyed before the OT is finished, the colonist group fails to establish a colony and is eliminated.

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27.7.3 Constructing ATLGs

27.8 Trade and Treaties

27.9 Domestic Matters

27.9.1 Governments

27.9.2 Contentment and Unrest

27.10 Encounters

27.10.1 Combat

27.10.2 Parallel Dimension Encounters

27.11 Espionage

27.11.1 Spies

27.12 Conquest

27.12.1 Ground Forces

27.13 Homeworld, Empire and Trade Campaigns

27.13.1 Homeworld Campaigns

The typical homeworld campaign will begin with all factions at Technology Level 1 and only a few simple technologies available to them. One or two hull types will be available, and the homeworld will be established just enough to provide a few RUs and RPs in the early turns.

Homeworld campaigns will begin slowly, as players expand out into their solar systems and begin developing colonies, all without coming into contact with the other players in the game.

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27.13.2 Empire Campaigns

27.13.3 Trade Campaigns

27.14 Solo Campaigns

27.14.1 Campaign Paths

27.14.1.1 Trader

27.14.1.1A Manufacturer

27.14.1.2 Mercenary

27.14.1.2A Assassin

27.14.1.3 Explorer

27.14.1.3A Xenologist

27.14.1.4 Diplomat

27.14.1.4A Conqueror

27.14.2 The Game Master

28.0 RTS Campaigns

28.1 Chess-Master Campaign

The goal of a chess-master campaign is to defeat the starbase occupying an opponent's home hex. As soon as the starbase is destroyed, the controlling faction is eliminated from the game and all of its units are removed from the board.

28.1.1 Starting Conditions

The typical chess-master campaign uses a hex campaign board of 20 hexes on a side.

Players begin on opposite sides of the campaign board with a single starbase worth at least 5,000 CP and 10,000 CP of additional units. (For purposes of balance, players may wish to calibrate that 10,000 CP against the cost of each starbase, and make the total CP allowance 15,000 CP for all units.) All units begin in the faction's home hex, along with the (immobile) starbase.

28.1.2 The Campaign Turn

Each campaign turn consists of three phases: production, movement and combat. Each player performs each phase simultaneously with the other players, so that there is no first-turn advantage.

The campaign ends when only one faction's starbase survives.

28.1.3 Production

At the beginning of each turn, every player gains 1,000 CP with which to build units. Unused construction points may be carried over to subsequent turns. Units built during the production phase must be placed in the faction's home hex.

Players may not build stationary units, but they may build hyper-dreadnoughts and mobile bases.

For every full 100 CP of enemy ships that a faction has destroyed on a single turn, that faction gains an additional 10 CP *each turn* during the production phase. Thus, a faction that destroys 480 CP of enemy ships on a turn will gain an additional 40 CP on every subsequent turn, not only on the turn following the destruction of those 480 CP of ships.

Leftover CP of destroyed ships is not carried over to subsequent turns. (So, the unexploited 80 CP in the previous example would be lost.)

28.1.3.1 Beachhead (optional Rule)

If all players agree, factions may place new ships in any hex that contains ships from its own faction totaling at least 15,000 CP. Ships placed in this fashion may not move during the movement phase of the current turn.

28.1.4 Campaign Movement

Although each hex on the campaign board represents a single star system, a chess-master campaign does not concern itself with interstellar travel in the normal sense.

A First Rate ship may move one hex per turn. A Second Rate ship may move two hexes per turn. A Third Rate ship may move three hexes per turn. A Fourth Rate ship may move four hexes per turn. Small Vessels may move to any hex on the campaign board. Hyper-dreadnoughts and mobile bases may move one hex every two turns.

Players may split a fleet into smaller groups, or keep all of its ships together. However, in that event, the fleet may only move as far as its "slowest" ship. Thus, a fleet with a mix of First and Third Rate ships may only move one hex per turn.

28.1.5 Combat

At the end of each movement phase, if there are units from opposing factions occupying the same campaign hex, combat will commence. Combat takes place on a separate combat board, according to the master rules.

28.1.5.1 Ships Only Combat

If the campaign hex contains no starbases, combat takes place between the two (or more) opposing fleets. Players set up their ships within five hexes of the edge of the combat map board, and combat ensues according to the master rules.

In campaigns with more than two factions in which a single campaign hex contains ships from three or more factions, all combat occurs at the same time for that hex. Players *do not* engage in combat one-on-one: all factions appear on the combat board at the same time.

28.1.5.2 Starbases

If the contested hex is a home hex, its starbase is placed in the center of the combat map board and all of that player's ships are placed within five hexes of the starbase.

28.1.5.3 Victory and Defeat

Combat continues until only one faction has units on the combat board. If one of the combatants has lost a starbase, that faction is eliminated from the game.

28.1.6 Determining the Winner

The winner of a chess-master campaign is the last player in control of a home hex starbase.

28.2 Go-Master Campaign

The goal of a go-master campaign is to occupy the greatest number of hexes after a set number of turns. Once the campaign's time limit has been reached, all players count up the number of occupied hexes. The player with the highest total wins the game.

28.2.1 Starting Conditions

The typical go-master campaign uses a hex campaign board of 10 hexes on a side and a campaign length of 100 turns.

Players begin on opposite sides of the campaign board with a single starbase worth at least 5,000 CP and 10,000 CP of additional units. (For purposes of balance, players may wish to calibrate that 10,000 CP against the cost of each starbase, and make the total CP allowance 15,000 CP for all units.) All units begin in the faction's home hex, along with the (immobile) starbase.

28.2.2 The Campaign Turn

Each campaign turn consists of three phases: production, movement and combat. Each player performs each phase simultaneously with the other players, so that there is no first-turn advantage.

At the end of the final combat of the final campaign turn, players tally up the number of hexes occupied by each faction to determine the winner.

28.2.3 Production

At the beginning of each turn, every player gains 1,000 CP with which to build units. Unused construction points may be carried over to subsequent turns. Units built during the production phase may be placed on the board at any starbase owned by the player's faction.

For each starbase controlled by a faction (other than the home starbase), that faction receives an additional 250 CP during each production phase.

28.2.3.1 Building Starbases

A starbase may be constructed in any uncontested, occupied hex at which the faction's player has ships. If the hex has been occupied for a single turn (i.e., from the end of the combat phase of the previous turn), the player may build a starbase there at full cost.

If a hex has been occupied for *two* turns and is uncontested in the current production phase, the player may build a starbase there for *1/2* the CP cost of the starbase (rounded up).

If a hex has been occupied for *three or more* turns and is uncontested in the current production phase, the player may build a starbase there for *1/4* the CP cost of the starbase (rounded up).

Thus, it is worthwhile for each player to hold onto "empty" hexes for as long as possible before building a starbase in that location.

28.2.3.2 Secondary Starbases

Players may add a second starbase to any hex that already contains a starbase owned by the same faction. This second starbase must be paid at full cost and does not contribute to Victory Point totals at the end of the campaign.

28.2.3.3 Other Stationary Units

Stationary units other than starbases are permitted, but they do not count toward victory determination and they cannot be used to claim control of a hex. Stationary units other than starbases may not occupy a hex alone (i.e, without ships). Any non-starbase stationary unit that is left in a hex without ships from its own faction is immediately removed from the board.

28.2.4 Campaign Movement

Although each hex on the campaign board represents a single star system, a go-master campaign does not concern itself with interstellar travel in the normal sense.

Any ship or fleet of ships may move up to two hexes from its current location, regardless of whether or not it carries a trans-light drive.

During the movement phase of a campaign turn, each player may **activate** up to three hexes containing his or her ships. Some or all of the ships in these activated hexes may move up to two hexes away. Fleets may be divided or combined as desired; not all ships from one hex need to move to the same destination hex.

Note that movement is simultaneous for all players. Each player should write down his or her movement plans and then reveal them together.

Players may not enter another faction's home hex.

28.2.4.1 Starbase Hyper Transition (Optional Rule)

If all players agree, starbases may be used as "hyperspace tunnels" for the owning faction's ships. There are two options for this rule. One or both may be used.

Option 1. If any ships land on a starbase belonging to the same faction during the movement phase, those ships may move an additional two hexes. This additional

movement allowance is permitted only once for each ship (or group of ships) in each movement phase.

Option 2. Instead of moving according to the standard rules, ships in an activated hex may be moved to any one hex containing a starbase owned by the same faction. Note that *all* ships in the activated hex must move to the *same* starbase hex: splitting a fleet is not permitted, and part of an activated fleet may not move according to the standard rules while the remainder uses this starbase hyper transition option.

28.2.5 Combat

At the end of each movement phase, if there are units from opposing factions occupying the same campaign hex, combat will commence. Combat takes place on a separate combat board, according to the master rules.

28.2.5.1 Ships Only Combat

If the campaign hex contains no starbases, combat takes place between the two (or more) opposing fleets. Players set up their ships within five hexes of the edge of the combat map board, and combat ensues according to the master rules.

In campaigns with more than two factions in which a single campaign hex contains ships from three or more factions, all combat occurs at the same time for that hex. Players *do not* engage in combat one-on-one: all factions appear on the combat board at the same time.

28.2.5.2 Starbases

If one of the factions owns a starbase in the contested hex, that starbase is placed in the center of the combat map board and all of that player's ships are placed within five hexes of the starbase.

If the player owns two starbases, both must be placed within ten hexes of one another, near the center of the board, and all of that faction's ships must be within five hexes of at least one of the starbases.

28.2.5.3 Victory and Defeat

When only one faction has units present at the end of a combat turn, that faction is victorious and wins the contested campaign hex. If the victorious faction controls a starbase, that starbase remains in the hex. If the victorious faction has lost a starbase, that starbase is removed from the campaign hex, but the player retains control of the hex.

For the purposes of starbase purchase, the turn counter resets: this is the *first* turn of occupation. The player may build a starbase in the hex at full cost on the next turn.

If one or more factions retreat from the field of combat (according to rules of engagement decided by the players before the game begins), those ships must be moved off the campaign hex. They must be moved to an adjacent hex, and may not employ either of the optional rules listed in Rule 9.2.4.1. Starbases may not retreat.

28.2.6 Determining the Winner

After the final turn of the campaign, each player counts the number of hexes containing his or her faction's starbases. Each of these hexes is worth two points, including the home hex. Each player then adds to this the number of hexes without starbases containing his or her faction's ships and no other faction's ships.

The total is the player's number of Victory Points for the campaign. The winner is the player with the highest VP total. Ties are possible.

29.0 Fleet-Level Combat

The standard **Cold Infinity** rules are ideal for small engagements between squadrons of starships and support vessels. Large-scale engagements take longer to play out due to the level of detail in the standard rules.

Fleet-level combat—engagements between groups of ten or more units on a side—requires some simplification to make the game run more smoothly. This simplification of the rules does not fundamentally alter the way the game is played: the Turn Sequence remains largely the same, and all ships designed for the standard rules may be used in fleet-level combat.

The rules presented in this section may also be used for smaller engagements, replacing the existing standard rules, if all players agree. Fleet-level combat is optional in that any engagement of any size may be played using the standard rules, but it is not recommended for large engagements.

For all purposes, be aware that these rules represent an abstraction of the small engagement rules presented in the master ruleset. As such, fleet-level combat will not produce combat results identical to the same battle conducted using the more detailed rules.

29.1 Task Forces

A **task force** is a collection of starships (in one or more squadrons) assigned to complete a single **mission**. At least one starship in each task force will have a flag bridge. The minimum size of a task force is ten starships.

In fleet-level combat, one or more task forces will engage on each side of the battle. If all sides involved are deploying less than one full task force (i.e., fewer than ten starships), the standard combat rules should be used.

29.2 Squadrons

A **squadron** is a collection of two or more starships (though usually no more than six) that are commanded by a single lead ship. They can be understood as the starship equivalent of a fighter group. Most squadrons comprise units of a similar size and class, though this is not a hard and fast rule. One of the starships in the squadron is identified as the **squadron leader**. Instructions from the flag ship of the squadron's task force are relayed to the squadron leader, which then disseminates the orders to the rest of the squadron.

Small vessel groups are not considered squadrons.

29.2.1 Flotillas and Convoys

A **flotilla** is a squadron of non-combat support vessels, including but not limited to supply freighters, ship repair vessels and hospital ships. For the purposes of fleet-level combat, a flotilla is treated like a squadron. Flotillas should have one **flotilla leader**, treated as a squadron leader, for the purposes of formation and barrage rules.

A **convoy** is a squadron of transports (personnel and/or materiel) escorted by a number of third- and fourth-rate starships. During an engagement a convoy will separate tactically into a squadron of escorts and a flotilla of transports.

29.3 Movement

Movement in fleet-level combat is handled with **acceleration points** and **maneuver points** instead of thrust. It is not necessary to track a ship's thrusters and engines.

29.3.1 Simultaneous Movement

Units in fleet-level combat do not use initiative. Instead, during the Movement Step, all players secretly determine how they will allocate their movement points (see below), then reveal them simultaneously. Ramming attempts must be decided prior to this declaration; the resulting movement of the units involved may prevent a ram.

29.3.2 Acceleration Points

A unit has a number of acceleration points equal to the maximum number of hexes it may accelerate in a turn without overthrusting. If a ship is able to decelerate more or less than it may accelerate, use the average of the two (rounded up).

Example: If a battleship has forward thrusters with a total channel Rating of 12 and aft thrusters with a total channel rating of 18, it can decelerate 2 hexes per turn (6x2) and accelerate 3 hexes per turn (6x3). This gives it 3 acceleration points (the average being 2.5, rounded up).

During the Movement Step, a unit may accelerate or decelerate a number of hexes equal to its acceleration point total. Overthrusting is possible, but for each extra acceleration point the ship takes one point of damage to its propulsion system group (Rule 18.6.1).

29.3.3 Maneuver Points

A unit has a number of maneuver points equal to the maximum number of hexes it may pivot in a turn without overthrusting. During the Movement Step, a unit may pivot, roll or tumble a number of hex-sides or 90º increments equal to its maneuver point total, or accelerate via sliding a number of hexes equal to *half* that total. A unit may not pivot, roll or tumble *and* slide on the same turn.

29.3.4 Formations

At the beginning of a turn, players may designate one or more squadrons as being **in formation**. The individual units of a squadron that is in formation do not move independently; instead, they remain in formation relative to their squadron leader.

During the Movement Step, move the squadron leader first. All other units in the squadron are then placed in a position relative to the leader that is the same as the relative position at the start of the Movement Step. This position is relative to the squadron leader's vector and includes hex, layer and facing. All units in a squadron will have the same vector and speed as the leader.

Squadrons that are in formation may only use as many acceleration points as the slowest unit in the squadron, and as many maneuver points as the least agile unit in the squadron.

The main benefit of flying in formation is that a squadron's units may maintain a specific "pattern" without having to manage each unit's accelerations and maneuvers, and the points required to maintain the formation are not taken into account. (For example, units on the "outer" edge of a formation turn do not have to expend more points than units on the "inner" edge.)

The main disadvantages of flying in formation are that agile and fast units cannot take advantage of those attributes, and some formation maneuvers will force units out of line of sight of their targets or into the firing arcs of enemy ships.

Squadrons will remain in formation throughout the current turn. They may continue to remain in formation on subsequent turns until the player chooses to end the formation. Once a squadron is out of formation, it must spend at least two turns out of formation before it may re-form.

29.3.4.1 Detachment

If a unit within a formation becomes damaged enough to reduce its acceleration or maneuver points sufficiently to become a liability to the formation, it may be **detached** from the squadron.

A detached unit is no longer part of its squadron. It may not return to the squadron for the remainder of combat and may not join another. Detached units may not enter formations.

If a squadron leader is detached, another unit in the squadron must be designated as the leader. Detachment is permitted whether or not the squadron is currently in formation.

Depending on the rules of engagement agreed by the players (or the factions!), a detached unit may or may not be required to leave the field of battle.

29.4 Direct Fire Combat

11.4.1 Range

Ranges are handled in as three distinct types instead of on a per-hex basis. The three types are **close range**, **medium range** and **long range**. Each weapon must be classified under one of these ranges, based on their standard rules range:

- **Close Range:** –3/hex, –2/hex, –1/hex
- **Medium Range:** –1/2hex, –1/3hex
- **Long Range:** –1/4hex and greater

The maximum distance a close range weapon may fire is 3 hexes. The maximum distance a medium range weapon may fire is 15 hexes. The maximum distance a long range weapon may fire is 30 hexes. There are no range penalties in fleet-level combat.

If a unit does not have lock-on to its target, weapon range is shifted by one distance (long becomes medium, medium becomes close). Weapons with close range Ratings may not fire.

29.4.2 Rate of Fire

For fleet-level combat, keeping track of each weapon's rate of fire becomes tedious. The rate of fire of a weapon in fleet-level combat is therefore understood as an average: the likelihood that, on any given turn, the weapon will be able to fire.

At the beginning of the Fire Determination Phase, players roll 1d10 for each weapon group they intend to fire (see Rule 11.4.3). Check the result against the weapon's Rate of Fire using the table below. If the result of the roll is equal to or less than the number in the right column, the weapon group may fire on the current turn. If the roll is higher, the weapon group cannot fire on the current turn.

Rate of Fire	Target Roll
1+0 or better	10
1+1	5
1+2	3
1+3 or worse	2

Weapons with a RoF greater than 1+0 may fire as many times each turn as indicated by the RoF.

By using a die roll instead of precise rates of fire it is possible that a weapon will fire more or less frequently than expected over a given number of turns. *On average*, however, the resulting rate of fire will roughly match the RoF of the standard rules.

29.4.2.1 Cooldown

If a weapon group that requires a cooldown was fired on the previous turn, roll 2d10 instead of 1d10. Weapon groups do not need specifically to cool down; the effects of a cooldown period are handled by the decreased chance of firing.

29.4.3 Saturation

Weapon systems are not treated individually in fleet-level combat. Instead, they are treated as **weapon groups**. A group consists of every weapon of the same design on the unit. *Example:* A dreadnought is carrying ten particle weapons, seven of which are identified as High-Energy Particle Beams. The other three are called Blaster Cannons. The dreadnought therefore is wielding two weapon groups: a High-Energy Particle Beam group and a Blaster Cannon group.

When a unit fires its weapons, it fires them as groups, not as individual systems. The number of weapons in the group that a unit can bring to bear on its target—that is, the number of weapons in the group that have a firing arc capable of hitting the target—is called the group's **saturation count**.

When firing a weapon group, roll once to hit, as if the ship were firing only one weapon. On a successful strike, roll for damage as usual. Apply this amount of damage a number of times equal to the saturation count. If the weapon normally does multiple volleys of damage (as is the case with pulse and slashing weapons, for example), handle the damage according to the standard rules. If the weapon normally does a single volley of damage (as is the case with burst and flare weapons, for example), divide the damage into a number of volleys equal to the saturation count.

29.4.3.1 High Rates of Fire

If a weapon group's RoF is 2+0 or higher, it may fire more than once in each turn, as per the standard rules. If the weapon group is being fired at the same target throughout the turn, multiply the group's saturation count by its Rate of Fire and roll once to hit. If the weapon group is being fired at different targets on the same turn, treat each target separately.

29.4.3.2 Defensive Fire

Weapons used for Defensive Fire will also have a saturation count, calculated in the same manner. The DF weapon group applies a DRM to the attacker's to-hit roll equal to the applicable DF multiplied by its saturation count.

Depending on the saturation count of the incoming weapon, the targeted unit may receive a DF bonus or penalty (i.e., the to-hit roll may have a further modified DRM) *in addition to* the DF DRM. If more than one weapon group is being used for DF against a single incoming weapon group's shot, determine the additional DRM for each DF weapon group separately.

Saturation	To-Hit DRM
Incoming fire saturation greater than DF saturation	*add* the difference in saturation counts
Incoming fire saturation less than DF saturation	*subtract* the difference in saturation counts
Saturation counts are equal	no additional DRM

29.4.3.3 Ablative Defensive Fire

Weapons with the Ablative Defensive Fire enhancement are treated differently:

- If the saturation counts of the incoming fire and the DF weapon group are identical, the base (unmultiplied) damage of the incoming fire is reduced according to the rules for the enhancement. Do not multiply by the DF weapon group's saturation count.
- If the DF weapon group's saturation count is greater than that of the incoming fire, the base (unmultiplied) damage of the incoming fire is reduced according to the rules for the enhancement. Do not multiply by the DF weapon group's saturation count. In addition, the saturation count of the incoming fire is reduced by 1.
- If the DF weapon group's saturation count is less than that of the incoming fire, the base (unmultiplied) damage of the incoming fire is reduced according to the rules for the enhancement. Do not multiply by the DF weapon group's saturation count. However, the saturation count of the incoming fire is increased by 1 for every 2 full rows of damage reduction.

29.4.4 Hit Locations

Fleet-level combat does not use the standard hit locations chart. On a to-hit roll (including DRM) of 12 or below, the weapon misses its target. (This increase from 10 to 12 compensates for the lack of a range penalty.)

On a roll of 13–16, the weapon strikes hull structure (full strength). To determine how much hull structure a unit has, sum the hull structure blocks of each system. Fleet-level hull structure has armor equal to the *average* of the unit's standard hull structure armor (rounded up).

On a roll of 17 or higher, roll 1d6:

1-2	Propulsion Systems	5	Defensive Systems
3-4	Offensive Systems	6	Command Systems

Each system group is an aggregate of the relevant systems found on a unit's standard SDS. Sum the system structure of each system in the group to determine the group's total structure. As with hull structure, armor is equal to the average of the unit's armor for the relevant systems. If no systems exist within a given group (as is the case for propulsion systems on stationary structures), re-roll the 1d6 for hit location.

Propulsion Systems: Thrusters, Engines, Trans-Light Drives

Offensive Systems: All weapons capable of offensive fire (direct fire, guided and proximity)

Defensive Systems: All weapons not capable of offensive fire, Shields, weapon Collector Panels

Command Systems: Bridge, Sensors, Power Plants (including non-weapon Collector Panels)

All other systems are not taken into account when determining system groups.

29.4.4.1 Shields, Sectional Armor and Collector Panels

Handle the effects of shields, sectional armor and weapon collector panels according to the standard rules.

29.4.5 Weapon Configurations

Burst weapons are handled normally, according to the standard rules. Other weapon configurations adhere to the following rules:

- **Pulse:** All pulses strike the same system group as separate volleys.
- **Slashing:** Each damage group strikes the same system group as separate volleys.
- **Slicing, Wave, Enveloping:** If the shot strikes hull structure, half damage is applied to the hull structure group; the remainder is applied equally to the system groups (excess damage is lost). If the shot strikes systems, damage is applied equally to all system groups (excess damage is lost).
- **Flare:** Treat flare attacks as burst attacks.
- **Piercing:** Half of the total damage is done to hull structure; the other half is applied to one of the system groups. This occurs regardless of the hit location result.

29.4.6 Optional Abstracted Firing Arcs

Players may wish to use an abstracted firing arc system instead of the full set of firing arc cubes. Use only one system at a time; they are not compatible with one another. This rule applies both to direct fire weapons and to guided weapons.

Abstracted System 1. For the purposes of determining whether or not a weapon may fire at its target, treat every firing arc for every weapon as a Wide arc. If the weapon's actual firing arc is Standard, apply a -1 DRM to hit. If the weapons arc is Narrow, apply a -3 DRM to hit. If the weapon arc is Fixed, apply a -5 DRM to hit.

Abstracted System 2. Individual weapons do not use firing arcs and do not have facings. Using the Standard firing arc cube, determine which weapon facing can be used to attack the target. If the facing is 1, every weapon may fire at the target without penalty. For all other facings, use the following table:

Facing	To Hit DRM	Facing
Facing 1/2 or 2	-1	Facing 6 or 6/1
Facing 2/3	-2	Facing 5/6
Facing 3 or 3/4	-3	Facing 4/5 or 5
Facing 4	-4	

29.5 Guided Weapon Combat

Unlike direct fire weapons, guided weapons are usually treated individually when fired from a single ship, even if multiple weapons of the same type are present. Rate of Fire is handled in the same manner as with direct fire weapons.

29.5.1 Synchronized Barrage

Every unit in a squadron may fire its guided weapons simultaneously at an enemy squadron, using a single to-hit roll for each group of guided weapons. This is called a **synchronized barrage** attack. Range is determined based on the distance between squadron leaders. If the attack is successful, the resulting damage is combined and then divided evenly among the enemy units. Use Rule 29.4.4 to determine success and hit locations.

Defensive Fire may be applied in the same manner as with direct fire weapons. Determine the guided weapon saturation by the same method as for direct fire, combined across all ships in the squadron. The saturation count of the

defensive fire is also combined across all ships in the target squadron.

Guided weapons with special effects that cannot be divided in this way must be fired independently.

29.6 Damage Effects

29.6.1 Propulsion Systems

When the propulsion system group loses half of its structure points (rounded down), the ship's acceleration and maneuver points are cut in half (rounded down). Once the propulsion system group has lost all of its structure points, the ship's engines and thrusters shut down; its acceleration and maneuver points are set to zero.

29.6.2 Offensive Systems

When the offensive system group loses half its structure points (rounded down), the range Rating of every weapon is reduced by one row. In addition, all elements of the damage Rating are reduced by one row (as per Rule 13.1.9). Once the offensive system group has lost all of its structure points, all offensive weapons are considered destroyed.

29.6.3 Defensive Systems

When the defensive system group loses half its structure points (rounded down), the Ratings of all shields are cut in half (deflection, absorption and buffering) and the DF Ratings of all weapons are reduced by 1.

29.6.4 Command Systems

When the command system group loses half its structure points (rounded down), the EW Ratings of all sensors are cut in half.

29.6.5 Destroyed System Groups

If a system group is destroyed, all future damage to the group (including overkill damage on the current shot) is applied to hull structure instead.

29.7 Small Vessel Combat

Small vessels do not use vector-based movement at the fleet level. Each small vessel has a number of **movement points** equal to two-thirds its available thrust (rounded up). During the Movement Step, a small vessel may move a number of hexes equal to its movement point total, in any direction. A small vessel's facing is not tracked. A small vessel may fire its weapon(s) in any direction; the firing arc is ignored. When a small vessel is hit by weapons fire, use its highest armor Rating.

29.8 Special Weapon Effects

Weapons with enhancements and limitations that affect individual ship systems or structure must be adjusted for fleet-level abstraction. The simplest method is to convert each +10% of unusable enhancements into +1 fixed damage, and each –10% of unusable limitations into –1 fixed damage. Example: A weapon that has the No Overkill limitation (-20%), which is not relevant for fleet-level combat, receives a –2 penalty to total damage. Damage penalties cannot reduce the total damage to less than 1 point.

More detailed options are presented in the table at the back of the Rulebook. Only those enhancements and limitations that are affected by fleet-level rules are listed. If an entry is not found for fleet-level combat, use the rules as described in the Ship Systems Book.

29.9 Power Requirements

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29.9.1 Surplus Power

29.9.2 Shortfall Power

29.9.3 Using Surplus Power

29.10 Rapid Combat

((Using offensive/defensive CP ratios to resolve combat quickly and very abstractly, for large-scale campaigns that involve many non-decisive battles.))