VBAM: Galaxies

Overview: **develop new optional rules and combat system for VBAM, compare to existing 2E and see best course forward with the rules.**

FEEL FREE TO ADD COMMENTS OR MAKE SUGGESTIONS IN THE TEXT! I WANT THIS TO BE AS COLLABORATIVE A PROCESS AS POSSIBLE.

If you have problems signing up for a forums account, please comment here or send us an email and we'll get it sorted out

Chapter 1 ▸ Introduction

The universe is a vast, mysterious, and dangerous place. These "billions and billions" of stars are home to an untold number of alien civilizations, each of them reaching out into space to fulfill their birthright of galactic domination. Some empires may use peaceful exploration, expansion, and diplomacy to achieve their goals. Other civilizations may seek to forge an empire of blood and iron, relying on their military forces to subjugate an unprepared galaxy. This is the battleground upon which players pit their empires against one another in a battle for supremacy and victory by any means.

1.1 ▸ About the Game

Victory by Any Means (VBAM) is a 4X science fiction strategy game that lets you guide an interstellar empire to victory by exploring the galaxy, meeting strange new alien civilizations, and fighting epic wars

to determine the fate of the universe. **VBAM: Galaxies** includes all of the basic rules that you'll need to run a successful VBAM campaign.

But what is a campaign? A campaign is defined as a strategic gaming experience in the classic 4X style in which players command their forces to eXplore, eXpand, eXploit, and eXterminate in order to achieve victory. The term 4X was coined by Alan Emrich in his September 1993 preview of the classic game *Master of Orion*. Since then it has come to refer to any strategy game that offers a detailed, multi-layered experience that requires players to take command of a faction and manage its resources while trying to meet a series of victory conditions or other objectives as specified by the scenario. Combat, diplomacy, research, and spying are all common elements of the 4X genre.

VBAM is a modular campaign system that allows players to scale the complexity of the game to meet their needs. You should think of it as a toolbox that contains all of the rules that you'll need to run a complete science fiction strategy game in any imaginable campaign setting. A number of optional rules are included later in this book that add extra depth to the basic rules, and experienced players can make large-scale changes to the basic rules if they think it will improve their game experience. This modularity is especially useful when players want to integrate VBAM with their favorite tactical combat game. For example, if the tactical game already includes rules for unit construction and tech advancement you can have them effectively replace the respective rules from this book. In most cases this just requires a few spot rules to cover how the two sets of rules interact with each other.

There are two ways that players can approach a VBAM campaign. The default option is to play the game as a classic freeform 4X space strategy game in which you start in a single system and expand across the galaxy, competing with other players to achieve predetermined victory conditions. This provides a traditional strategic gaming experience akin to that of games like *Master of Orion*, *Galactic Civilizations*, or *Endless Space*. Alternatively, these rules can be used to run traditional wargame scenarios, providing players with a "historical" snapshot of a collection of empires at a specific point in time. The campaign replicates events that occurred in that particular setting while giving you enough control to "change history" with your actions. This is similar to how historical wargamers replay major land or sea battles like Waterloo or Leyte Gulf to see how closely their results align with the historical outcome of those battles.

1.2 ▸ What You Need to Play

Players must have a copy of this book (which you already have) and a collection of polyhedral dice. You will need several six-sided (d6), ten-sided (d10), and twenty-sided (d20) dice to play this game. At least two d10 dice are required because many rules require the player to roll a d100 (percentile die) against a target number. When asked to roll a d100 or percentile die, the player should instead roll one d10 die for the tens place and the other d10 for the ones place. For example, if the tens die rolls a "4" and the ones die rolls an "8", then the final result on the d100 roll is "48". Rolling two "0's" produces a result of "100".

Players will also need pencils, paper, and all of the other paraphernalia required to record and track information during the game. Some sample forms are included in the appendices, but players shouldn't feel obligated to use these forms in their own games if they don't want to. You can create new versions

of these forms or use other methods of tracking campaign and empire information in whatever way is the easiest or most intuitive for you and your gaming group.

Perhaps the most important asset players will need to have available is time. Campaigns can take days, weeks, months, or maybe even years to run to completion depending on how often the players can meet or otherwise submit and process their turn orders. Players should consider how much time they have available when deciding on the size and scope of the campaign they are going to participate in.

While a campaign can be successfully run using nothing more than pen-and-paper, it is obviously much easier to track campaign information and make calculations on the fly using electronic aids such as word processors and spreadsheets. This is especially true for players that find themselves overwhelmed by the concept of running a campaign completely by hand. Players that have access to a laptop, netbook, or tablet can easily bring these electronic aids to the gaming table to help automate certain aspects of running the game.

An effective approach to electronic campaign data management is to create a text document for each player that contains their economic and military organization information (e.g., things that are updated each turn that can be more easily stored in a word processor) and then use a spreadsheet to generate a list of the players' colonies, along with how much they're producing for their owner each turn, and calculate maintenance costs for their military units. These forms can then be converted into PDF files and distributed to the players at the beginning of each campaign turn so that they can draft their turn orders for that turn.

1.3 ▸ Campaign Moderator

One player usually takes on the role of the Campaign Moderator ("CM" for short) who is responsible for organizing and running the game. The main job of a CM is to collect and resolve the turn orders that the players submit every turn and then let the players know what happened so that they can prepare for the next turn.

Before each game, you should decide if your campaign is going to be run with or without a CM. The main advantage to having a CM run the game is that he can control what information each player has access to, adding a fog of war element to the game. This forces players to gather intelligence on their opponents or risk being left in the dark. This added uncertainty can make the game more exciting for the players, especially those that thrive on the social aspect of the game that comes from conducting diplomacy with their friends and enemies around the gaming table.

Another perk of playing with a CM is that he can string together otherwise unrelated campaign events to form an overarching campaign storyline, plot, or narrative. This infusion of imagination can increase the tension and intensity of action within the campaign and make disparate events all seems like they are part of an interwoven story. For example, let's suppose that several players have begun finding mysterious ancient ruins scattered throughout the galaxy. Normally these random discoveries would be just that: random. However, the CM can craft a story that connects these disparate ruins and provide hints or clues as to what happened to the vanished civilization that built them. The culmination of that

storyline might be that the force that wiped out these colonies is returning… or maybe it was a complex alien bio-weapon, a deadly contagion that will infect the populations of the empires now exploring through the ruins? The CM has broad liberty to incorporate these kinds of game play elements into a campaign.

When resolving turn orders and generating new campaign turns the CM should adhere to the written campaign rules except as modified by any special scenario or house rules that are being used in the campaign. Players should feel free to query the CM when they feel that a rule isn't being applied correctly, fairly, or uniformly. There are enough "moving parts" within these rules that it's easy for either the player or CM to make a mistake, and these kinds of challenges are a healthy part of the gaming experience. However, the CM is the final arbiter of the campaign rules in his game and once he has ruled on an issue — hopefully after polling his players for feedback and consulting the relevant campaign rules — the issue should be considered settled. That being said, CMs should be careful to avoid capricious, off-the-cuff decisions as it will almost certainly alienate their players and can ultimately derail the game.

1.4 ▸ Playing Without a Moderator

Players can choose to run a campaign without the aid of a neutral moderator. In this case, most (but not all) fog of war aspects are eliminated from the game and the campaign is run in an "open-handed" fashion in which very little information is actually kept secret. This lack of secrecy is a necessary evil because the players need to know what each other are doing so that they can make sure that everyone is following the rules. This is not to say that you should suspect that your opponents are actively cheating when playing without a CM — we would hope that you're gaming with trustworthy players — but honest mistakes are possible and even likely, especially when players are first learning the rules. By making game play and turn resolution as transparent as possible the players will be able to catch any rules errors quickly enough to prevent them from having a major effect on the game.

In the event there is a debate about the interpretation of a rule or the legality of an order, it is up to the players to collectively decide what to do about it. In most circumstances the easiest way to resolve these disputes is to put it up to a player vote. The option that receives a simple majority of the player support in the vote is then adopted as the solution to the problem until such time as an official ruling can be procured that contravenes the players' own ruling.

Please be aware that arguments between players in an unmoderated campaign can be even more destructive than in a moderated campaign because all of the players are involved in the resolution process in the former, while in the latter a neutral CM is responsible for making the final decision. It only takes one extremely contentious rule dispute for a campaign to fall apart. Players should attempt to be as impartial as possible when making these decisions, and they should be prepared to vote against their own empire's best interests if doing so will enforce the "correct" interpretation of a rule.

In the event of a "no-win" argument, the players should at least consider finding a compromise that will satisfy the majority of the players, even if it doesn't satisfy everyone completely. For example, consider that a rule has been misinterpreted for a large part of the campaign, and one or more players planned their strategy around either exploiting or defending against this rules misinterpretation. This rule change

might even be “game ending” in that their military force might be completely nullified by the correct interpretation of the rules. At this point in the campaign correcting the rule will put these players at a distinct disadvantage compared to their opponents whose decision making processes weren’t affected by the ruling. In such a situation, especially if the mistake was made by multiple players in the same campaign, the players may want to give the affected players the opportunity to retroactively alter their existing fleet compositions so that they can remain competitive even after the rules change goes into effect in order to keep the campaign alive. For example, the player could exchange a certain construction cost of units for the same cost of other units.

1.5 ▸ Basic Terms

Every game system ends up with a considerable amount of jargon that players have to become familiar with in order to read and understand their rules. This section provides a list of the most commonly used terms in the book (arranged alphabetically) that players can refer to later on when they need to quickly look up what a term means. New players should feel free to skip this section and come back later when they need to look up a specific term.

Allied: The empires are members of the same Alliance.

Anomalies are strange phenomena that are sometimes found in star systems (nebulae, ruins, etc.). Their presence adds additional complications to how players interact with these systems. See @@ Anomalies for a list of anomalies and their effects.

Anti-Fighter (AF) encompasses all of the active point defense and anti-fighter weapons that units can use to protect themselves against flights of fighters. This includes such things as anti-fighter batteries, flak cannons, counter-missiles, and sand casters.

Anti-Ship (AS) is a measure of a unit’s offensive firepower that quantifies the lethality of the beam, kinetic, and/or missile weapons that are part of its standard arsenal. The more heavily armed a unit is, the higher its Anti-Ship value will be.

Attack (ATK) represents a ground unit’s offensive firepower. This statistic is the basic Attack bonus that is added to an attacking unit’s combat roll. The target takes Attrition damage if its modified Attack roll exceeds the target’s modified Defense value.

Attrition (ATR) is the amount of damage that a ground force can take before they are neutralized. Ground forces don’t cripple and are simply destroyed when their Attrition reaches zero.

Base

Campaign Moderator (CM)

Campaign Turn

Campaign Year

Carrying Capacity

Census is an abstract representation of a system's population size. Uninhabited systems always have a Census value of zero, but any system whose Census value is greater than that is inhabited by anywhere from a few thousand colonists on the low end to several billion on the high end. These Census are used to utilize Productivity and turn local RAW into economic output. A colony is destroyed when its Census value is reduced to zero.

Colony

Control: A player has control of a system his empire has a colony, outpost, or a total of at least 12 construction cost of bases (not minefields) present. This represents a significant enough presence for them to claim ownership of the system.

Construction Capacity

Command Cost (CC)

Command Rating (CR)

Convoys

Crippled

D Factor (DF)

Defense Value (DV)

Enemy

Flagship

Fleet: A fleet is a collection of one or more military or civilian units that are operating together. Movement orders are issues to fleets during the Movement Phase to move them across the map.

Flight

Friend

Homeworld

In-Service Date (ISD)

Intel represents an empire's intelligence network that is used to carry out offensive and defensive missions. Intel can be used to gather information about other systems, sabotage enemy assets, or incite rebellion on alien worlds.

Jump Lane

Morale represents how loyal the system is to its empire. Unhappy colonies are less productive and extreme discontent can even lead to open rebellion! A system's Morale value cannot exceed its current Census value.

Outpost

Output: economic output of the system

Productivity

RAW; resources, accessibility, wealth

Readiness Modifier

Reinforcements

Sequence of Play

Shipyard

Ship

Special Ability

Starting Forces

Supply Depot

System

System Importance

System Output is a system's economic contribution to the owner's empire and is equal to its RAW x Utilized Productivity. This is the amount of income that the system produces for its owner each turn and the construction capacity of any shipyards.

Surprise

Task Force

Tech Investment

Tech Pool: The economic points that an empire invests into technology research are placed into its Tech Pool. The chance of gaining a tech advance increases as more economic points are invested into tech. @@ Tech Advancement checks are made for each empire at the end of each campaign year. The Tech Pool is reset to zero if the empire's Tech Year increases as the result of this check, otherwise the economic points carry over to the next campaign year.

Tech Year

Treasury: All of the economic points that an empire earns are placed into its Treasury. The player can then spend economic points from this pool to make new purchases or investments each turn.

Unrest: Colonies are in a state of unrest when their Morale values are less than half their Census but still greater than zero. Systems that are experiencing unrest are gripped by a deep malaise that can manifest itself in the form of labor stoppages, anti-government protests, and rioting. A system's Utilized Productivity is halved when it's in unrest. Round fractional Utilized Productivity values up.

Utilized Productivity: The amount of Productivity that a system's population is capable of operating is called its Utilized Productivity and is equal to the lesser of its Census or Productivity values. To put it a different way, each point of Census can only "utilize" one point of Productivity. Any excess Productivity beyond the system's Census value is left unused due to a lack of available manpower.

1.6 ▸ Campaign Strategic Combat Resolution (CSCR)

Space and ground combat in VBAM are normally resolved using the included Campaign Strategic Combat Resolution (CSCR) rules found in @@ Encounter Phase and @@ Ground Combat Phase later in this book.

~~You can also use your favorite tactical combat system to determine the outcome of some or all of the battles as they occur during the campaign. Players should discuss their combat resolution options before the start of the game and decide if they're going to exclusively use the strategic combat resolution rules or if they're going to be using a separate tactical rules system for space or ground combat battles. The default option is to use the CSCR to resolve all battles in the campaign.~~

~~If you're using these rules in conjunction with another tactical combat system, you'll need to decide upon guidelines for deciding which battles are going to be resolved strategically or tactically. Playing out each and every battle using a tactical system can become quite tedious. It's strongly recommended that you use the CSCR to resolve smaller engagements or those where one side is completely outmatched by their opponent. These battles are less important and their outcomes are often foregone conclusions. Gaming time is typically at a premium as it is, so it just makes more sense to resolve these minor battles strategically and reserve the use of your preferred tactical system for the resolution of only the most important, climactic battles in your campaign.~~

~~You should try to integrate as many of the strategic combat concepts into your tactical rules as possible when using a tactical system to resolve combat. In particular, you should find a way to translate surprise, readiness modifiers, and scenario length into your tactical battles.~~

1.7 ▸ Changes in Galaxies

1.8 ▸ Your First Game

The focus of your first game of VBAM should be on learning the rules and getting better acquainted with how the campaign system works. It's recommended that new players start out by running a two player game as this will let you get some experience with how the rules work before you try to tackle a larger campaign. You can play through a year or two of the campaign before taking a break to take stock of where you're at in the game and review the rules to see what mistakes you might have made or if there are any rules that you're still unclear on. If things seem to be going well you can continue playing the game, but if you found that you made some particularly egregious errors you might consider restarting the scenario to see how those corrections affect play.

Part of the difficulty that you'll run into when you run your first game is trying to learn how the rule system works when so much of the terminology and game concepts are still foreign to you. This is a problem inherent with learning any new game, but it's made worse with pen-and-paper rules like this because there aren't any outside visual cues that you can use to help you out. Reading through the basic terms at the end of this chapter should give you a good idea of what the basic building blocks of a campaign look like, the problem is figuring out how they all fit together. Chapter 3: Playing the Game tries to bridge that knowledge gap and explain in order how everything relates to one another and how you step through and resolve events during a campaign turn. While it might be obvious, you really need to read through that chapter before you play your first game.

Once you've completed your first two player campaign you should understand enough of the fundamentals of the game to set up and play through a campaign with a larger number of players, or else play one of the other campaign scenarios found in the Scenarios chapter.

While it might be tempting for a group of four or more players to just jump right into a campaign together, at least one of the players should set up and run through a sample campaign first so that they will have a better idea of how the game works. That player can then help bring everyone else up to speed. Otherwise, if none of the players have any experience with the rules prior to the first game, there's a good chance that a misinterpreted rule will end up derailing the game before you get very far. This can still be a great learning experience, of course, but it also means that the players might have to go through campaign setup a second time if the rules mistakes they made can't be corrected on the fly during their first game.

Chapter 2 ▸ Getting Started

This chapter walks you through all of the steps required to set up and run a VBAM campaign. When starting a game you must pick your empires, set a time period, and finish setting up the game. Once these steps are completed you'll be ready to sit down and start playing the game.

// possibly make game simpler by making basic game a 4x start from scratch and move other scenarios to options rules?

2.1 ▸ Empire Selection

Players take turns selecting which empires they are going to play in the campaign. This book includes eight different alien factions that players can choose from. The empire that you choose determines which types of units you'll have available during the game. Each empire has its own unique tech tree and no two empires are the same. This forces players to adopt different tactics and strategies depending on the empire that they're playing as — and who they are playing against.

The following is a brief overview of the empires that are included in this book. Complete descriptions for each of these factions are provided in 6.0 Alien Empires. Force lists for each of these factions can be found in the appendices at the end of this book.

- **Brindaki Empire**
- **Graal Kingdoms**
- **Jain Khanate**
- **Kili Republic**
- **Loran Imperium**
- **Senorian Federation**
- **Terran Commonwealth**
- **Tirelon Theocracy**

Player's Note: *It is recommended that player's new to the game play as the Terran Commonwealth as their units have the fewest special rules or abilities. The examples in this book are written from the perspective of a Terran empire.*

2.2 ▸ Tech Era

Technology in a VBAM campaign is divided into five Tech Eras that describe an alien civilization's overall level of technology advancement. Each empire has six units available in each Tech Era, and a player must unlock all of the units at its current Era to advance to the next Era. An empire's Tech Era therefore determines which units it has available at the start of the game.

At the start of each campaign, players must decide on a starting Tech Era for their empires. By default, players start in Era I with only the units on their Starting Forces list unlocked. They then advance their

technology from there by investing into research and earning tech advancements during the game. This gives each player access to a core X units at the start of the game.

Players that want to run a more advanced campaign may decide to start their empires at a higher Tech Era. Each player then begins with all units from the preceding Eras unlocked at the start of the campaign. For example, an empire that starts at Tech Era III would have unlocked all of the units on the Starting Forces, Era I, and Era II lists.

Additionally, you may choose to have an empire start with one or more units already unlocked at its current Tech Era.

Player's Note: *Some campaigns may use the @@ In-Service Date alternative to determine when new units become available. This is a popular option for historical scenarios where units in the setting were introduced in a specific order.*

// The sample empires in this book have 5 Eras with

- Starting Forces (+0)
- Era I (+10%)
- Era II (+20%)
- Era III (+30%)
- Era IV (+40%)
- Era V (+50%)

// Precursor derelicts are at Era X (+100%)

2.3 ▸ Choose Optional Rules

Now is the time to decide whether or not you'll be using any optional rules in your campaign. You can use one or more of the rules found in 4.0 Optional Rules or else you can create and use your own house rules. You should make a list of all of the optional rules and house rules (if any) that will be used in your campaign before you start the game. That way everyone will know which optional rules are being used.

New players should stick to the basic campaign rules until they are more comfortable with VBAM, then they can start playing with the advanced or optional rules that are found later in this book. That being said, you should take a look at the available optional rules so you know what options are out there.

2.4 ▸ Galaxy Map

The players must choose the size of map to use for their campaign. There are five different map sizes: Tiny (2 player), Small (3 player), Medium (4 player), Large (5 player), and Huge (6 player). Each map is

comprised of a single "hub" system that is surrounded by a number of rings of extra systems equal to the number of players in the game. For example, a Huge map has a central hub system plus six rings of systems around it. Blank map templates for each of these sizes are also included in the appendices so that players can easily print out a copy and starting creating their own star maps.

Players that would like to eschew exploration and jump right into the action can use the @@ Random Galaxy Generator to pregenerate a complete star map. A pre-generated map of each map size can be found at the back of this book to make campaign setup even easier.

2.5 ▸ "Starting Position"

2.5.1 ▸ Homeworlds

The players take turns choosing a hex to place their their homeworlds in. The minimum distance between homeworlds is equal to the number of systems in the last ring divided by the number of players in the game, dropping any fractions. This is how many hexes apart the homeworlds must be from each other. This forces players to spread out their homeworlds and space themselves more evenly around the ~~outer edge of the~~ map. A player cannot place their homeworld in a hex if it would prevent any of the remaining players from being able to legally place a homeworld on the map.

Each player's homeworld is automatically a Major system with the Homeworld special trait (see @@ System Generation). The two special traits that the system receives during system generation then apply their bonuses to the system's base statistics. Some players may prefer for everyone to start with the same special traits to secure a more balanced starting position. In that case, each homeworld should be given the *Rare Metals* and *Fair Biosphere* traits.

- Home system for an empire
- Homeworlds get an extra special trait
- Player Homeworlds get +2 Census, +2 Morale, +2 Productivity at the start of the game
- For a balanced Homeworld start, have each player Homeworld start with Precious Minerals and Fair Biosphere. This gives these systems +2 Capacity, +2 RAW, +1 Census, and +1 Productivity
- When a Homeworld system is encountered during the game as the result of exploration, the system is the Homeworld for a minor power. This can be a Non-Aligned World (neutral system) or a Non-Player Empire (CMs refer to the Companion for rules).
- Randomly choose an empire; this neutral system uses that empire's force list
- Neutral current tech era is found by rolling d6-1
    - Or have it be based on highest player era, or the campaign year like in 2E; any preference? 2d10-12 would give us a +-10 year span, and then use the tech year of the most advanced player empire
- This makes it so you don't need to do activation checks, and finding multi-system NPE is left as a VERY optional rule that I can cover in a later book.
- Adds a natural way to introduce neutral systems into a campaign. The chance is low (1 in 36), but just common enough that you might find some new neutral powers to interact with.

2.5.2 ▸ Colonies

// placing starting colonies; how many of them?

2.6 ▸ System Generation

The following system generation rules and tables are used at the start of the game to create statistics for the player's homeworlds and again during the game to generate statistics for any new systems that the players explore.

2.6.1 ▸ System Importance

Roll on the System Importance Table to determine the system's base value. There are three different levels of system importance: unimportant, minor, and major. The more important the system, the more resources and living space are available to accommodate alien colonies. Important systems also tend to have more jump lanes connecting to them. These importance levels help to classify systems and allow players to gauge their relative value without having to consult their actual statistics. The size of a system's marker on a star map is usually linked to its system importance so that you can quickly differentiate systems by their importance when looking at the map.

System Importance Table (d6)

Roll	*Importance*	*Cap*	*RAW*	*Cen*	*Mor*	*Prd*
1-2	Unimportant	4	1	2	2	1
3-4	Minor	6	2	4	3	2
5-6	Major	8	4	6	4	3

2.6.1.1 ▸ Unimportant System

Unimportant systems have hostile planetary environments that make them largely unsuitable for colonization. Scouts can sometimes find unimportant systems that are rich in certain rare elements and others that have fair climates, but rarely will one of these systems have both.

2.6.1.2 ▸ Minor System

Minor systems possess worlds that are capable of sustaining life, but these planets are usually post-garden worlds that have barren environments or other adverse planetary conditions that make them less suitable for colonization.

2.6.1.3 ▸ Major System

Major systems contain Earth-like garden worlds that are prime candidates for colonization. These systems have the highest possible system resource values in the game, but they are also exceedingly rare. This makes them extremely valuable.

2.6.2 ▸ Special Traits

Each system rolls once on the Special Traits Table to determine what special characteristics set it apart from other systems. Player homeworlds automatically receive the *Homeworld* special trait and get to roll twice on the Special Traits Table, ensuring that these worlds start with at least two special traits. Player Homeworlds also receive a +2 bonus to their Census, Morale, and Productivity at the start of the game to represent the large populations in these systems.

Special Traits Table (2d6)

Roll	*Special Trait*
2-3	Ultra Rich (+2 RAW, +1 Productivity)
4	Mild Climate (+1 RAW, +1 Census)
5	Fair Government (+1 RAW, +1 Morale)
6	Fair Climate (+1 Capacity, +1 Productivity)
7	Rare Metals (+1 RAW, +1 Productivity)
8	Expanded Population (+1 Capacity, +1 Census, +1 Morale)
9	Fair Biosphere (+2 Capacity, +1 Census)
10	Stellar Anomaly (See @@ Stellar Anomalies, Roll Again)
11	Homeworld (See @@ Homeworlds)
12	Roll Twice

2.6.4 ▸ Stellar Anomalies

Many star systems have extraordinary characteristics that have special effects on play. Any system that rolls a *Stellar Anomaly* on the Special Traits Table must roll on the Stellar Anomalies Table to discover what kind of anomaly is in the system. In rare cases, a system may continue more than one anomaly. However, a system can only receive each anomaly once. If the same anomaly is rolled a second time, re-roll until a different anomaly result is rolled.

Stellar Anomalies Table (d10)

Roll	*Stellar Anomaly*
1	Abandoned Colony
2	Dense Asteroids
3	Derelict

4	Dust Cloud
5	Nebula
6	Plasma Storm
7	Splinter Colony
8	Strategic Resource
9	Ruins
10	Mysterious Encounter (or CM's Choice)

// if we move to a separate roll for Stellar Anomalies, here's an attempt to break them apart:

Stellar Anomalies Table (2d6)

Roll	*Stellar Anomaly*
2	Splinter Colony
3	Abandoned Colony
4	Strategic Resource
5	Dense Asteroids
6-8	No Effect
9	Nebula
10	Ruins
11	Derelict
12	Mysterious Encounter (or Roll Twice)

2.6.4.1 ▸ Abandoned Colony

This system contains the remnants of an abandoned alien colony that covers most of the planet's surface. It's impossible to tell how long this world has been deserted, and there are no clues left behind to explain why the original colonists disappeared. While nothing of technological interest remains at the colony, the colonial infrastructure itself is in remarkably good shape. Future inhabitants will be able to move into the empty halls of this vast planetary city and take up residence there, reducing the need to move in expensive modular habitats to accommodate the colonists.

This system retains its starting Productivity even if it is an @@ Uninhabited System when it is generated. This Productivity represents the surviving structures on the planet that remain intact. There are extensive ruined sections of the colony that can be repaired. This reduces the cost of all Productivity increases in this system to half that of normal (round fractional costs up).

2.6.4.2 ▸ Dense Asteroids

Many star systems contain dense asteroid belts that dwarf our own familiar asteroid belt. These asteroids are more akin to the types of asteroid fields depicted in popular science fiction, where ships have to actively maneuver to avoid hitting debris as they pass through the belt. These asteroid fields are extremely rich in precious metals and radioactives, which is a boon to industry in the system. These resources are easily exploitable by local industry and doubles the construction capacity of the system and any shipyards present.

If a space combat scenario is generated in a system that contains dense asteroids, task forces have the option of entering the asteroid field in search of protection from the enemy fleet. During the Assignments Phase of the combat round, a player declares whether any units in his task force are hiding within the asteroids. Units hiding within the asteroid field reduce their AS and AF values to half that of normal (round up) because the high concentration of asteroids prevents a clear firing solution. However, these asteroids effectively reduce the enemy's ability to hit them, increasing their DV by 50% (round up). The unit's base formation level is reduced to zero because the asteroid prevent the fleet from assuming a defensive formation. This demonstrates that hunting down individual ships in an asteroid field is easier than pursuing a full fleet action in that environment.

2.6.4.3 ▸ Derelict

Routine system surveys sometimes uncover the presence of alien derelicts drifting in deep space or crashed and abandoned on the surface of distant worlds. Many of these derelicts show obvious signs of battle damage, indicating that they survived a battle only to later be deserted by their crews. Other wrecks show no apparent signs of damage and offer few clues as to why they were cast off. In any event, alien derelicts are lasting monuments to the empires that built them so many years ago.

The discovery of an alien derelict can be a major boon for an empire. Derelicts tend to be more advanced than the vessels that the empire that discovers them could build themselves. For instance, an ancient alien frigate could have the same firepower as one of the power's own heavy cruisers!

Roll on the Derelict Ship Table to determine the type of derelict that has been found in the system. Statistics for these derelict units are provided on the following table. For those ships that have a CV greater than zero, roll on the Derelict Flight Table for each point of CV to find out what abandoned flights are still aboard the derelict (if any).

Alien derelicts are always in a crippled state after they are discovered. Time has not been kind to these spacecraft, but their engines are still intact and the engineering teams sent to reactivate them can at least get the engines restarted so that the derelict can return home under its own power. Derelicts are alien ships and are subject to the @@ Operating Alien Units rule.

Once the derelict is found, you must decide what to do with it. The first order of business is usually going to be to move the derelict back to a friendly system for repair. Alternately, an empire may choose to simply scuttle (destroy) the derelict. Unless you're using the @@ Derelict Encounters optional rule, the only reason to voluntarily destroy the derelict would be if your empire is not in a position to recover the starship and you wish to keep it out of the hands of a rival power. Before scuttling the ship, your teams are able to scavenge some of the ship's systems in order to transfer them back home for study. This earns your empire a tech investment reward equal to 2 times the ship's Construction Cost (round up).

Derelict Ship Table (2d6)

Roll	*Ship*	*TL*	*Class*	*Cost*	*Maint*	*DV*	*AS*	*AF*	*CV*	*CR*	*CC*	*Special Notes*
2-3	Roll Twice											
4	Corvette	TL6	CT	3	2/8	3	3	3	0	3	1	Atmospheric, Fast
5	Destroyer	TL6	DD	5	2/6	5	5	4	0	4	1	Fast
6	Light Cruiser	TL6	CL	6	2/4	7	6	5	1	5	2	
7	Heavy Cruiser	TL6	CA	8	2/3	9	8	5	2	6	3	
8	Battlecruiser	TL6	CB	10	2/2	10	9	6	3	8	4	
9	Battleship	TL6	BB	12	3/2	12	10	6	4	10	5	
10	Dreadnought	TL6	DN	14	4/2	13	11	7	5	12	6	
11	Superdreadnought	TL6	SD	18	6/2	16	15	9	6	14	8	
12	Titan	TL6	TN	24	8/2	20	20	14	8	16	10	

Derelict Flight Table (2d6)

Roll	*Flight*	*TL*	*Class*	*Cost*	*Maint*	*DV*	*AS*	*AF*	*Special Notes*
2-5	No Flight Present								
6	Shuttle	TL6	MF	3	X	5	0	0	Atmospheric, Supply 1
7	Light Fighter	TL6	LF	1	X	2	2	2	Atmospheric
8	Medium Fighter	TL6	MF	2	X	3	3	3	Atmospheric
9	Heavy Fighter	TL6	HF	3	X	4	4	4	Atmospheric

10	Super-Hvy Fighter	TL6	SHF	4	X	5	5	5	Atmospheric
11	Heavy Bomber	TL6	HF	4	X	6	5	1	Atmospheric, Strikefighter
12	Superheavy Bomber	TL6	SHF	5	X	8	6	1	Atmospheric, Strikefighter

2.6.4.4 ▸ Dust Cloud

Young stars are often surrounded by dense clouds of particulate matter. The protoplanetary disks around these stars have not yet fully accreted and a dust cloud fills the entire system. Although often beautiful to behold, dust clouds pose a significant danger to passing ships. Vessels must be careful to travel only along previously charted routes when moving through the system lest they suffer damage or destruction if they pass through particularly dense uncharted debris fields.

Task forces receive a -1 penalty to their surprise rolls in all battles that take place in a system that contains a dust cloud. The thick accumulation of dust in the system makes it more difficult for fleets to maneuver and coordinate during battle, effectively doubling the command costs of all units as commanders are forced to battle the dust cloud as much as their opponent when issuing orders to their task force.

2.6.4.4 ▸ Nebula

Nebulae are vast interstellar clouds of dust and gas that give birth to new stars. Occasionally, a nebula may be found in close proximity to a star system. Space battles within these systems take place in or on the periphery of the nebula. The ionized gasses in the nebula interfere with their sensors and targeting controls. To represent this, fleets in a nebula system receive a -4 penalty to their surprise rolls, which increases the chances that they'll start at lower readiness states.

Ships that start the turn in a nebula system and remain in the system during the Movement Phase automatically move into the nebula to conceal their presence. These units are then treated as Stealth 1 units for the remainder of the turn. Units that already have the Stealth special ability instead receive a +1 Stealth bonus. Hiding in a nebula makes it easier for fleets to avoid contact with any opponents that might enter or pass through the system later this turn and makes it harder for opposing Scouts to detect them.

2.6.4.5 ▸ Mysterious Encounter

Mysterious encounters offer CMs an opportunity to introduce rare or one-of-a-kind anomalies into a campaign. For example, the system might contain a galactic wonder or be the site of some famous event that is integral to your scenario setting. These special anomalies add character to a campaign, and players can use them as plot hooks to advance the overarching story of their campaign setting.

2.6.4.6 ▸ Plasma Storm

A plasma storm is a dense field of ionized gas. It is extremely difficult to chart a safe course through a plasma storm, and all units immediately stop moving when they enter a system that contains a plasma storm. This makes it harder for players to move ships through the system and makes it more likely that

they'll try to find an alternate route to their destinations so that they don't have to deal with the plasma storm.

The unpredictability of the storm makes fighting battles in the system inadvisable to say the least. Small escorts can maneuver around the plasma streamers with relative ease, but larger vessels have a much harder time avoiding the hazards, especially when they're fighting for their lives against a determined opponent. To model this, the AS values of all ships with command costs of 3+ are halved in all non-Defensive scenarios fought in these systems (round fractional AS values up). Flights and bases are unaffected by the plasma storm.

2.6.4.7 ▸ Splinter Colony

This system is home to a long-lost splinter colony founded by the crew of a generation ship that launched from your homeworld prior to the advent of faster-than-light travel. The colony's inhabitants are happy to have been rediscovered by their starfaring cousins and will automatically join your empire. The first empire to discover this system immediately gains control of the system. The system keeps all of the Census, Morale, and Productivity that it receives during system generation to represent the size and extent of the existing colony.

The splinter colony receives a number of economic points equal to five (5) times its economic output to spend on starting forces when it is activated. These are the assets that the colony controlled before it was rediscovered. The splinter colony starts with a Tech Era equal to that of the discovering empire. It may purchase any units that are available on the discoverer's force list, or you can create a custom force list just for the splinter colony to represent the unique military forces that it developed while in isolation. Creating a new force list means extra work for the CM, and it's unlikely that the discovering player will want to build any more of these units; however, it does help give the splinter colony its own unique character that sets it apart from the empire that found them.

The empire that discovered the splinter colony now takes ownership of the system and all of its units, adding them to its own forces. All of the unique classes that the splinter colony starts out with (if any) are added to the discovering empire's force list.

2.6.4.8 ▸ Strategic Resource

Strategic resources are rare substances that confer major advantages to the empires that control them. In popular science fiction, strategic resources often appear as forms of unobtainium that are valuable because they are very rare or impossible to synthesize. Locating and controlling these resources is a major concern in many science fiction settings, and a common point of conflict.

This resource conveys a commercial benefit to its system, doubling the system's Utilized Productivity for the purposes of calculating @@ Commerce Income for trade routes that operate in the system. For example, a system with 6 Utilized Productivity and a strategic resource would have an effective 12 Utilized Productivity when calculating the amount of commerce income is earned by the trade convoys that are actively trading there.

2.6.4.9 ▸ Ruins

The planets in this system are littered with the crumbling remnants of some advanced alien civilization that lived here millennia ago, but which has apparently long since disappeared from the pages of history. Glittering cities, shrouded in darkness and abandoned for eons. Hidden grottos, silent except for the slow but steady pulse of dormant machinery. Psychic echoes lingering like wraiths in the great halls of forgotten empires that rose and fell before the dawn of recorded history. These mysterious reminders of ancient empires can be of significant archaeological and technical interest to those empires that encounter them.

The first empire to discover a ruins system with ruins present receives a tech investment bonus equal to five (5) times the system's Carrying Capacity. After this initial system survey, all relics of any import are removed from the system and future visitors won't find anything of value, thus only the first empire to visit the system gets a tech investment bonus.

Once colonized, a system containing ruins provides a persistent tech investment bonus to its owner equal to its Utilized Productivity. This makes colonizing and developing these systems a priority for empires that want to accelerate their tech advancement.

The First Ones

One of the most thrilling aspects of including system anomalies in your campaigns is that it gives the game a new sense of scope because players now have clear signs that theirs are not the first alien civilizations to call this galaxy home. The abandoned colonies, alien ruins, and derelict starships that they encounter during the game stand as a lasting reminder of the alien empires that rose and fell before their own nations took to the stars.

CMs should use these types of anomalies to build a backstory for the universe as it stood during the last great age of galactic civilization, before the current crop of upstart player empires came onto the scene. To this end, a CM should keep track of which alien empire owned the derelicts, ruins, or colonies that the players encounter during the game. Discovering a new anomaly then gives the players additional information about the empires that came before them, and possible insights into whatever cataclysm prompted their disappearance. This lets you craft a story that ties these otherwise random anomalies together.

As an example, a scout force explores a new system and discovers some Alien Ruins. As the CM, you might decide that these ruins belonged to the long dead Aztican Federation, an empire of bony-frilled armadillo-like creatures that dominated this region approximately 10,000 years ago, and these ruins are all that remains of one of the sector capitals of their empire. Later on, when another empire finds a derelict in a nearby system, you can tie the find back into the ruins storyline by making the derelict an Aztican hulk that was left abandoned for some reason. Was the ship attacked and left stranded in the system after its hyperdrive was destroyed? Or are there signs that someone forced entry onto the ship

and left it here after dealing with the crew? The final fate of the derelict doesn't have any practical impact on the outcome of the game, but it does create a fuller, richer universe for the players to explore.

As an alternative, in the above scenario you could instead decide that the derelict was owned by the Inderuil Hivemind, the dread enemy of the Azticans, and this ship was abandoned after a climactic battle that was fought in the system 6,800 years ago. For additional background, you could have the players recover combat logs from the derelict's flight computers, or possibly find some nearby lifeboats that also survived the battle, that tell the story about how this ship was involved in the Aztican's Pyrrhic last stand against the Inderuil swarm fleet. They succeeded in winning this battle, but it left them in such a weakened state that they ultimately lost the war. The reason the previously encountered colony was left in ruins was that the Inderuil laid waste to it during their advance into what had once been the heart of Aztican civilization.

Again, the focus on these kinds of story elements is to get your players more involved in the game and add a sense of continuity to the inherent randomness of system generation. These brief glimpses into the history of the campaign universe allow for emergent game play to take shape as the players begin theorycrafting as to the hows and whys of these dead civilizations. And, who knows, maybe some of the alien empires that left behind these ruins and derelicts aren't completely dead? Maybe they live on as an ascendant empire that the players are going to meet later on in the campaign.

2.6.5 ▸ Jump Lanes

Roll on the Jump Lanes Table to determine the number of jump lanes that connect to a system. Every system will have at least one jump lane connecting to it. ~~The jump lanes already connected to the system count against the system's total number of jump lanes. If the number of jump lanes rolled for a system is less than the number already connected to it, add no further lanes but don't remove any of the existing lanes, either. A system may end up having more jump lanes connect to it later on if future systems generate new jump lanes that link back to it.~~

Jump Lanes Table (d6)

Roll	*# of Jump Lanes*
0	1
1-2	2
3-4	3
5	4
6	5
7	6

Modifiers:

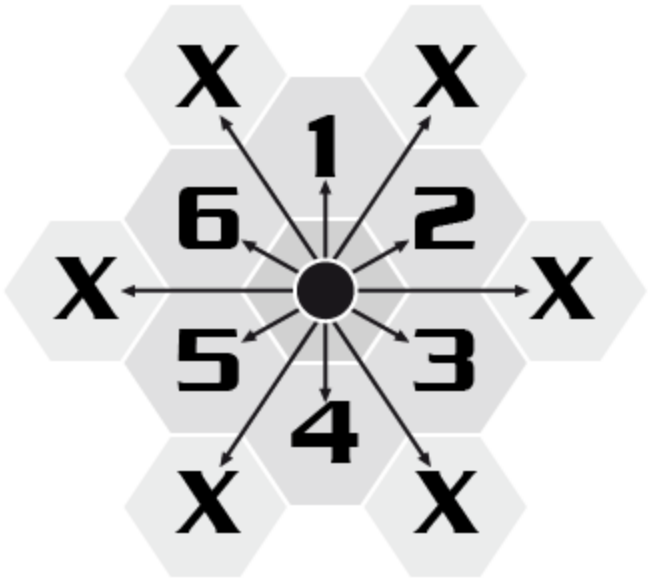
-1 Unimportant

+1 Major

- Roll d6 for which hex the jump lane should connect to as shown on the diagram.
- Cannot connect a jump lane to a system that has already been generated (only unexplored systems)
- If no valid targets remain adjacent to the system, then you can connect to a system up to 2 hexes away via a hex spine (X systems).
- Re-roll destination if it is outside the boundaries of the map; exception if we include off map systems (see next section)

The system's jump lanes must now be connected to other systems. ~~The first jump lane in the system will always connect to a system in the next ring up. If no system exists in that ring, create a new system and connect the jump lane to it. This ensures that the system will have at least one jump lane connecting to the next ring.~~

~~For each remaining jump lane, roll on the Jump Lane Position Table to determine where the jump lane should connect to. Depending on the die result, a jump lane will either connect to a random system in the previous ring, the same ring, or the next ring. Jump lanes should connect to the nearest applicable neighbors, if at all possible. When a jump lane connects to a system in the previous ring it will increase the number of jump lanes connecting to these already resolved systems. If a system has already linked to all possible targets of a Jump Lane Position Table result, simply re-roll until you can legally position the jump lane.~~



- That is how I've been doing it on my freeform maps. Does that seem fairly straightforward? I'll want to have an integrated example here, obviously, but any improvements that you can see?

2.6.6 ▸ Jump Lane Class

// all jump lanes start as unexplored lanes, but as they are explored you must roll to determine the class

//~~Roll on the Jump Lane Class Table for every jump lane on the map. Apply modifiers to the roll based on both systems that the jump lane connects to. For example, if both the systems that a jump lane connects to are Unimportant then the lane would have a -2 modifier to its roll on the Jump Lane Class Table (i.e., -1 for each Unimportant system).~~

Jump Lane Class Table (d6)

Roll	*Jump Lane Class*
2-	Restricted
3-5	Minor
6+	Major

Modifiers:

-1 Unimportant

+1 Major

2.6.X.1 ▸ Unexplored Lanes

2.6.X.2 ▸ Restricted Lanes

Restricted lanes are tenuous hyperspace routes that suffer from a lack of reliable navigation data. Frequently, these lanes have either been only tentatively mapped or the hyperspace route is so treacherous that authorities strongly caution against any passage.

2.6.X.3 ▸ Minor Lanes

Minor lanes are secondary jump lanes that are less frequently traveled. While they have been mapped there is either less reliability in the navigation aids for the jump point or the lane suffers from an odd hyperspace distortion that makes travelling across the lane more difficult.

2.6.X.4 ▸ Major Lanes

Major lanes are heavily-traveled jump lanes that have been thoroughly mapped and pre-plotted into core navigation systems. These routes provide the quickest, most reliable movement between galactic destinations.

2.6.7 ▸ Disconnected Regions

If during the course of the campaign players find that one or more regions of the map are cut off from one another because there are no jump lanes connecting them together, they should add a new unexplored lane between the disconnected regions to allow travel back and forth. This unexplored lane should run between two unimportant systems if at all possible as the remote nature of these two systems better explains why the jump lane wasn't discovered by previous scout expeditions.

Similarly, if there is ever a time that a map hex remains empty despite all of the surrounding hexes having been explored, players are encouraged to add a single unexplored lane to the map leading from one of the adjacent systems (preferably the least important) to this isolated system. This ensures that every hex on the map will contain a star system, and that every hex will still be accessible to the players.

CM's Note: *This spot rule ensures that all empires will be able to interact and you don't end up with areas of the map that are completely inaccessible. This usually only becomes a concern once most of the jump lanes in the galaxy have been explored and it becomes clear that some regions have become disconnected from the rest of the map.*

2.6.8 ▸ Uninhabited Systems

Uninhabited systems have their Census, Morale, and Productivity values reduced to zero to represent their lack of population and colonial infrastructure. Newly-explored star systems always begin in an uninhabited state unless they are a Homeworld or Splinter Colony.

2.7 ▸ Political Situation

- Empires are not in contact with each other at the start of the game
- Upon making first contact, the empires will be in a state of Non-Intercourse

2.8 ▸ Starting Forces

2.8.1 ▸ Military Units

// overview of the ship types here, maybe?

2.8.1.1 ▸ Ships

- Primary military unit
- Can move from system to system

2.8.1.2 ▸ Flights

- Small combatants that typically can't travel across jump lanes
- Rely on carriers to bring them into battle
- Can be based from friendly colonies (but not outposts)
- Can be crippled in combat, but surviving flights are automatically repaired at the end of combat

- Flight fire considers units to be in a formation 1 level lower than normal; allows for freer use of directed damage against an opponent

2.8.1.3 ▸ Bases

- bases are stationary ships
- Can only be included in Defensive scenarios
- Can control an uninhabited system if you have 12+ Cost or greater of bases there

2.8.1.4 ▸ Minefields

Minefields are strategic defensive weapons primarily used to interfere with enemy fleet movement.

- minefields match size of flights
- do not earn out of supply levels or else earn them at a highly diminished rate
- special combat deployment rules
- don't cripple
- fired upon using AS
- typically used to soak up damage meant for other units
- Stops units from moving by counting as a ship for the purposes of contested movement

2.8.1.5 ▸ Ground Forces

Ground forces are the troop units that are used to garrison friendly worlds or invade enemy colonies.

2.8.2 ▸ Civilian Units

// Shipyards, Supply Depots, and Convoys -- explain what they are in a bit more detail

All civilian units are considered to be non-combatants and they will automatically surrender to an enemy fleet if there are no friendly fleets present at their location to defend them. Civilian units are crippled when they are captured, as is the case with all @@ Captured Ships & Bases. This represents that the civilian crews have sabotaged key control systems before the enemy takes control to prevent them from getting any useful benefit out of the captured units until they are repaired.

2.8.2.1 ▸ Shipyards

- Orbital base used to build new ships and flights
- 20 EP, 1 EP per turn

2.8.2.2 ▸ Supply Depots

- Orbital base used to resupply friendly units
- 20 EP, 1 EP per turn

2.8.2.3 ▸ Convoys

Convoys are civilian merchant ships that an empire uses to transport goods and passengers back and forth across the galaxy, conduct interstellar trade, and establish new colonies. It cost 20 economic points to build a convoy, and they have a maintenance cost of 1/2.

- Civilian convoy fleets, selection of merchant ships

- Have a single convoy to replace all of the rest
- Can carry 1 Census

2.8.3 ▸ Purchasing Starting Forces

Each player starts with 1 Shipyard, 1 Supply Depot, 1 Convoy, and 100 economic points to spend on other starting forces for their empires before the game. This is enough economic points to field a respectable number of military and civilian units at the start of the game. These points can be used to purchase available units from the player's empire force list or the universal list that contains a selection of basic units that are available to all factions. If your empire seems to be lacking a certain type of unit, you'll probably find a unit on the universal list that can serve in that mission role.

~~Unit availability is based on the Tech Year that the empire is beginning the campaign at. All units that have an In-Service Date (ISD) less than or equal to the empire's starting Tech Year are currently available at the start of the game. For example, a campaign with a starting Tech Year of 3005 allows player to purchase units off their force lists that have an ISD of 3005 or earlier. A player won't gain access to any of the more advanced units until his empire earns a tech advance and increases its Tech Year increases during the game.~~

Any starting points that a player doesn't spend on starting forces are placed into his empire's Treasury and will carry over to the first campaign turn. It's best to spend as many of your starting points as you can during campaign setup. Spending fewer starting points gives you more purchasing flexibility once the campaign begins, but you'll likely be placed at a disadvantage compared to any of your neighbors that spent all of their starting points on military forces or civilian infrastructure.

CM's Note: *Players are free to adjust the number of economic points their empires have available to spend on starting forces before the game. Increasing the number of economic points that players are given to purchase starting forces is an easy way to jump start a campaign. Purchases made with these extra economic points are purchases that the players would normally have made during the first few dozen turns of the campaign. Also, because these starting points are usually spent on extra military units, each player is going to be in a better position to start early wars with their opponents. Just be aware that the larger your starting military forces are the more they will cost to maintain, which can be a problem for empires that can't generate enough income to cover those extra maintenance costs.*

2.8.4 ▸ Placing Starting Forces

~~After purchasing your empire's starting forces you have to decide where to place them on the map. You can place your starting forces in systems that are at most one jump away from a system that your empire already controls (i.e., at your homeworld or initial colonies), but you cannot place starting forces in systems that are controlled by other empires. An exception is made for Trade Fleets, and you can place them in an opponent's systems as long as your empire already has a Trade relationship with them.~~

~~The initial placement of your military forces is typically not a major concern because most of them can be redeployed to other systems during the game. For example, fleets of starships can use jump lanes to move to other systems as needed, and most other types of units can be loaded on to transports and then moved to other locations where they can be disembarked. If a fleet gets placed in the wrong system~~

by mistake at the start of the game, you can always just move it to another location on a future turn. This kind of movement is routine.

On the other hand, fixed defenses (including orbital system improvements like Orbital Shipyards) usually can't be moved after they are built. There are a few ways that you can move defenses from one system to another, but it's not very common. This makes it more important for you to pick the right system to place them in at the start of the campaign.

Orbital defenses (bases and minefields) should be placed in a player's more strategically important systems to guard them against enemy attacks. Jump lanes tend to constrain movement on the star map, which means there are usually a few natural choke point systems that an empire can fortify and protect that will prevent an opponent from gaining access to his other systems. The wise deployment of mobile and static forces allows an empire to maintain a safe border against aggressors as they expand.

You should consider where your opponents are likely to place their starting forces when you are deciding where to place your own starting forces. You don't want to be caught flat footed on the first turn of a campaign when an opponent declares war on your empire and moves a powerful armada into your territory from an adjacent star system. Look at the campaign map and see if there are any strategically valuable systems that you may need to secure with your starting forces. If these systems are within a jump of your existing systems you can place some of your starting forces there now. Otherwise, you should instead plan on putting your forces as close to them as you can so that they can make a beeline for the systems at the start of the campaign.

2.8.5 ▸ Starting Force Considerations

As a player, there are many things you have to take into consideration when you're purchasing your empire's starting forces. Your first concern is to make sure that you purchase enough military units to adequately defend your homeworld and first few colonies at the start of the game. This means purchasing enough defenses to protect all of your colonies while still having ships available that you could move into nearby neutral systems to stake a claim for your empire and keep them out of your opponent's hands. You also have to make sure that you have enough shipyards and Supply Depots available to meet your empires immediate ship construction and logistics needs, respectively.

In most cases, you won't have enough starting points to purchase everything you want. This leaves you in a position where you must decide to either purchase fewer but more powerful units or a greater number of cheaper, less capable units. This is the classic philosophical question of quantity versus quality. Usually it's better to diversify your military so that you will have enough light ships to properly escort your capital ships and still have enough leftover to use as system pickets once you start discovering new star systems.

Another issue that players often wrestle with is when and where to invest starting points into fixed defenses (bases, minefields) instead of mobile fleet units. These kinds of defenses can be quite effective because they are more powerful than a ship or flight of comparable size and cost. A strong fixed defense presence in a system is often enough to dissuade an opponent from launching an attack into the system.

Unfortunately, fixed defenses by their very nature are immobile and most players prefer to spend their resources on mobile fleet elements that they can redeploy as needed.

~~The best use of fixed defenses is to place them in strategic choke point systems. These are the systems that an enemy must break through in order to gain access to the jump lanes that lead to your empire's other colonies. Similarly, star systems that have large numbers of jump lanes connecting to them also tend to be good candidates for fixed defense investment.~~

~~When you're planning the defenses for your starting systems it is worth considering using flights and minefields to protect worlds that don't warrant a major fleet presence. These planetary defenses are cheap to build and maintain and can be easily replaced should they be eliminated by an alien fleet.~~

Players must also remember to spend some of their starting points on ground forces to protect their colonies against alien invasion or insurrection. Because this game focuses so much on space combat it's easy for players to forget that they need to garrison their planets. A good rule of thumb is to have at least one ground force for every Census in the system. If you don't have enough troops guarding your systems you'll leave them vulnerable to invasion by even a token enemy assault force.

2.9 ▸ Victory Conditions

- Choose which victory conditions are active in your campaign, and how many a player must meet in order to win the game.
- Victory conditions are checked during the End of Turn Phase; if a player has met enough victory conditions to fulfill the victory conditions, then they have won the game!

Expansion Victory

Own a percentage of all systems on the map

Owns X% of all planets. This translates into VBAM pretty well. This would be owning a % of systems on the map. It doesn't work for floating maps, but that isn't really a concern. It would also be made a static value, like 10 x # of players.

Scientific Victory

Advance to Tech Era VI

Attains Tech X in Y fields. Stars! had (IIRC) 8 different fields of technology, ranging from 0 to 26 in each. VBAM doesn't have anything like that, so if this was a victory condition it would have to be a Tech Year target.

Economic Victory

Have total system income greater than or equal to X

Exceeds a score of X. VBAM doesn't have a score system, but this would be something like Census.

Has a production capacity of X thousand. This would be your total system output, definitely.

Dominance Victory

Exceed second player's total system income by X%

Exceeds second player score by X%. This is basically a runaway winner test. If you're twice as strong as the next opponent, then you're probably cruising to victory anyway.

Military Victory

Have a total construction cost of military units equal to X.

Owns X capital ships. In Stars!, ships over a certain combat point value were classed as capital ships. You could therefore make owning a certain number of them a victory condition. For VBAM, I'd say this would say a battleship would be battlecruiser (CB) or larger.

Time Victory

Has the highest total system output after 120 turns.

Has the highest score after X years. This is a time victory. If you have the highest "score" after the deadline, you have fulfilled the victory condition.

2.10 ▸ Imperial Asset Sheets

VBAM uses a number of different forms to record and track the current state of an empire's assets. These are collectively referred to as imperial asset sheets. A player receives updated asset sheets in the @@ Economics Phase at the start of every turn that shows the location and disposition of all of his empire's various assets. The empire's name, the current campaign turn, and economic activity (income and expenses) for the turn are shown at the top of the imperial asset sheet for ease of reference. This lets the player know exactly which turn this record sheet applies to and what resources his empire has available to spend.

Sample versions of the basic imperial asset sheets are included with this book. Players are encouraged to create their own versions of these forms to tailor them specifically to their group's own unique play style, altering them as necessary to make it easier for them to resolve turns in a timely manner. For example, a player could list all of his colonies on one form and then use a separate form to track his military forces. It's ultimately up to the players to determine what format is best for their group and adjust their imperial asset sheets accordingly.

2.X ▸ Starting the Campaign

Once everyone has finished purchasing and placing their starting forces, you can begin playing the first turn of the campaign. Good luck, Admiral!

Chapter 3 ▸ Playing the Game

Once you've finished setting up your campaign, it's time to start playing the game. Each campaign turn is divided into different phases, and the order in which these phases are resolved is called the Sequence of Play. During each phase of the Sequence of Play, players take turns resolving their actions for that phase. All orders within a phase are resolved simultaneously, and players must completely resolve their actions in the current phase before they can advance to the next phase of the campaign turn. Play advances to the next campaign after the End of Turn Phase.

The rules in this chapter are presented in the same order as they appear in the Sequence of Play. This makes it easier to learn the rules because you can read through the book phase-by-phase and resolve turn orders as you go. It also gives new players a better sense for the flow of a campaign turn while at the same time helping veterans to find and reference rules as they go through a turn.

Sequence of Play

Economic Phase

Tech Phase

Intel Phase

Movement Phase

Supply Phase

Encounters Phase

Orbital Bombardment Phase

Ground Combat Phase

Construction Phase

Colony Phase

End of Turn Phase

3.1 ▸ Economic Phase

Empires live and die by the strength of their economies. Players begin the campaign turn by calculating their income and expenses.

3.1.1 ▸ System Income

Each system can only operate a number of Productivity equal to its Census to generate output. For example, a system with 4 Census could only make use of up to 4 Productivity at one time. Additional Productivity would go unused. The number of Productivity that a system can actually use is its Utilized Productivity.

Morale can affect the amount of Productivity that Census that operate. A system's Utilized Productivity is halved when it is in @@ Unrest and further reduced to zero when it is in @@ Rebellion.

The output of each system is calculated by multiplying the Utilized Productivity by the system's RAW. This is the number of economic points that the system generated this turn. The output of all planets is added together to calculate the total system income for you empire.

3.1.2 ▸ Commerce Income

Convoys on @@ Trade Routes generate an income equal to the Utilized Productivity of the systems they are trading in. Multiple convoys from the same player cannot be assigned to trade routes in the same system without trade saturation. For this purpose, the system's Utilized Productivity represents the total commerce income that it can contribute to trade for one player. If another player is allowed to trade in the system, they will also be able to generate income equal to its Utilized Productivity as well. You cannot trade in a system that is controlled by another player unless you have a @@ Trade treaty with them.

Total the income from all trade routes your empire earns to determine you commerce income for the turn. An empire earns an additional point of commerce income for each foreign trade route that is active in systems it controls. This income represents tariffs or fees that the empire is levying against these traders.

3.1.3 ▸ Maintenance

Nearly every unit that a player purchases demands upkeep in the form of a maintenance cost in order to keep them operational. All maintenance costs are provided in fractional notation, such as 1/6, where the numerator (1) is the number of economic points that are required to maintain a number of units equal to the denominator (6). In this example, it costs 1 economic point to maintain a maintenance group of up to 6 units of this class.

Maintenance costs are evaluated for each specific class of unit in service. For example, if you have an Atlantic light cruiser that has a maintenance cost of 2/4 and your empire has 24 active units of this class in service the total maintenance cost for this class would be 12 economic points because you have 6 full maintenance groups of Atlantic cruisers in service and each group (including partial groups) costs 2

economic points to maintain. Building an additional Atlantic light cruiser would cause the total maintenance cost of the class to increase to 14 economic points as you'd be paying to maintain an extra maintenance group for the class as partial maintenance groups of this class still cost the full 2 economic points to maintain.

Should you end up building a new heavy cruiser class, the Pacific, maintenance would be calculated separately for this class. If the Pacific has a maintenance cost of 2/3, it would cost 2 economic points to maintain each maintenance group of 3 units of this class. Building your first Pacific would then increase your total maintenance by 2 economic points per turn. The maintenance cost would remain steady at 2 economic points per turn until the fourth ship of the class was built, at which point the maintenance for the class would increase to 4 economic points per turn.

This maintenance system encourages players to produce units in groups, and to only build unit classes that they actually need. It discourages using several different classes of destroyer, for instance, because you're more likely to have more partial maintenance groups that you still must pay full maintenance for.

Units can be placed into special maintenance states that can halve (@@ Reserve Status) or eliminate (@@ Mothballed Status) their maintenance costs. Calculate the maintenance costs for units in different states independently. For instance, if you have 2 active Atlantic, 4 reserve Atlantic, and 1 mothballed Atlantic, your maintenance cost is 2 for the active, 1 for the reserves, and 0 for the mothballs.

Players must record their activation and deactivation orders during the Economics Phase, making sure that there is enough construction capacity available at their systems or shipyards to accommodate these actions. The maintenance status changes take effect during the @@ Activations @ Deactivations step of the @@ Construction Phase.

There is also a maintenance cost for Intel points at a rate of 1 economic point per 10 Intel points (or any fraction of 10 Intel points). Add up all Intel points that your empire controls before calculating the maintenance cost for all of them.

3.1.4 ▸ Miscellaneous Income or Expense

Occasionally, a random event or other one-time payment of economic points may occur that affects a player's income for the turn. Add or subtract these one-time items from your Treasure as appropriate.

3.1.5 ▸ Calculating Income

The number of economic points that an empire earns each turn is calculated using the following formula:

System Income + Commerce Income +
Miscellaneous Income - Maintenance Cost -
Miscellaneous Expense = Total Income

Add this income value to the player's Treasury to determine the amount of economic points the player has to spend on purchases this turn. If your Treasury is negative...

The paying of maintenance costs is not optional. If you are unable to pay for the maintenance of all your units, choose a total maintenance cost of units greater than or equal to your shortfall. The selected units are @@ Out of Supply this turn.

3.1.6 ▸ Spending Economic Points

Players may spend economic points from their respective Treasuries to make purchases for their empires this turn. Economic points that are left unspent in the Treasury carry over to the next campaign turn. You won't be able to make any purchases this turn if your Treasury balance is currently a negative value.

Players can spend economic points to invest in technology or to improve a system's Productivity. With optional rules there may also be other infrastructure items you can improve, such as jump lanes. Record all of your investments in economic points on your Turn Orders Sheet. The benefits of your investments are resolved in later phases.

Players record purchases, repairs and activations/deactivations of various units along with where they are built, repaired or activated/deactivated (see 3.7.1 Construction Completion Phase). Costs for all units (including repair costs) are listed in the source materials. These actions are completed in the 3.7 Construction Completion Phase but the economic points are subtracted from the Point Pool during the 3.2 Turns Orders Phase. Should events of the turn(s) prevent their completion the economic points are still spent and lost. Any construction that takes more than one campaign Turn to complete may be canceled in a later Turn Orders Phase and 50% of the amount of points already spent is refunded (see 3.7.13 Scrapping).

A power may only purchase ships that have an in service date less than the starting year plus the power's tech level. A power may only purchase units of their own racial origin or generic units, listed in the source materials.

3.1.7 ▸ Update Treasury

Subtract the total number of economic points that you spent in your turn orders this turn from your Treasury.

Economic Phase Example

//The Terran Commonwealth starts the game with a Treasury of 0

System Income

Sol has 8 Census, 7 Morale, and 6 Productivity. The system has sufficient Census to operate all of its Productivity, and this gives Sol a Utilized Productivity of 6. The system is in good order because its Morale is greater than or equal to half its Census. This gives Sol a system output equal to its Utilized Productivity (6) times RAW (5), which is 30 economic points.

Meanwhile, the colony in the Wolf system (3 Census, 1 Morale, 2 Productivity) is in a state of unrest because its Morale is less than half its Census value. This halves its Utilized Productivity, reducing it to 1. Wolf has 2 RAW, so its system output is 2 economic points per turn.

The Terran Commonwealth controls the following systems: Sol (30), Alpha Centauri (12), Proxima (4), Ross (6), and Wolf (2). The value in parenthesis is the system's output. The Terrans have a total system income 54 economic points this turn.

Commerce Income

The Terrans have trade routes in Sol (6), Alpha Centauri (4), Proxima (1), Ross (3), and Cygni (2). The number in parenthesis is the amount of Utilized Productivity present in each system. Cygni is a Brindaki colony, but the Terrans have a Trade treaty with the Brindaki that allows them to trade there. This gives the Commonwealth a total commerce income of 16 economic points per turn from its own trade routes. The Brindaki have also established trade routes to Sol and Alpha Centauri, and these two active foreign trade routes provide the Terrans with an additional 2 economic points per turn, for a total commerce income of 18 economic points per turn.

~~**System Income:** Sol is the only system that the Terran player controls right now. The system has 10 Carrying Capacity, 5 RAW, 8 Census, 7 Morale, and 6 Productivity. There are enough Census in Sol to operate all of its Productivity, giving it a Utilized Productivity of 6. The system's output is 6 Utilized Productivity x 5 RAW = 30 economic points per turn.~~

~~**Commerce Income:** The convoy that the Terran player assigned to a trade route in Sol before the game is going to generate commerce income for the Commonwealth this phase. The amount of income earned is equal to Sol's Utilized Productivity value, which is 6.~~

Maintenance:

Miscellaneous Income/Expense:

Calculating Income:

Spending Economic Points:

Update Treasury:

3.2 ▸ Tech Phase

It is important for any power to maintain an ample level of technological investment or risk falling behind a neighbor. On the same note, a player who keeps their investment high will possibly surpass their neighbors and outclass them in the next battle.

3.2.1 ▸ Tech Investment

Economic points can be spent to fund research and development efforts in your empire. Tech investment is important because researching new technologies gives an empire an edge over the competition in the form of new advanced unit classes. The total amount of tech investment that is required to achieve a tech advancement at the end of a campaign year is equal to the empire's total system income during the Tech Phase of the last turn of the year. This is called its tech advancement cost.

The maximum number of economic points that a player can spend on tech investment each turn is equal to the total Utilized Productivity in his empire. This represents the fact that an empire has a limited capacity for conducting research at its colonies regardless of the amount of income that it's earning from other sources. All of the economic points that an empire spends on tech investment are placed into its tech investment pool.

3.2.2 ▸ Tech Advancement

Tech advancement is evaluated annually (e.g., every 12 turns), so players will make their first tech advancement checks in the Tech Phase of Turn 12. When it is time to check for tech advancement, players roll a d100 and compare the roll to the percentage of their tech advancement requirement. This required tech investment is equal to the player's total system income at the start of the turn. The player then divides the amount of points in the tech investment pool by the required tech investment, rounding all fractions down, to determine their tech advancement chance. If you roll less than or equal to your tech advancement chance, then your empire will have successfully advanced its technology. You'll be guaranteed to achieve a tech advance if your tech investment pool is greater than or equal to your tech advancement requirement.

3.2.3 ▸ Failed Tech Advancement

If a player fails to achieve a tech advancement in the current 12 turn cycle, the amount of economic points invested in tech is carried over into the next year. This gives the player a head-start on their next tech investment.

3.2.4 ▸ Overpaying Tech Investment

Some players may want to speed up their research and development efforts by giving the scientific community additional funding, and paying more than your tech advancement requirement gives you a chance of earning a second tech advance. A player can invest as much as 200% of the required tech investment to potentially make a second tech advancement in the same 12 turn cycle. The amount of overpayment beyond that required for the first automatic tech advancement is used to calculate the odds of a second tech advancement. However, the chance for the second advancement is halved,

resulting in a maximum chance of 50% for a second tech advancement if you paid 200% of the required tech investment.

Additionally, unlike in normal tech investment, all overpayment is lost after making the check for a second tech advancement and these points do not carry over into the next year.

3.2.5 ▸ Tech Advancement Effects

- Each time that a tech advancement is made, the player unlocks one additional unit from his empire's current Tech Era. After unlocking six units at your current Tech Era, your empire's Tech Era advances by 1.
- Your tech investment pool is then reduced to zero.
- An an alternative option for settings where technological improvements are made in a chronological order,

Future Tech

The sample empires in this book do not have any units on their force lists beyond Tech Era V. Players whose empires advance to Era VI or beyond must use the unit design rules from @@ Creating Your Own Empire to design new units to add to their force lists for these advanced eras.

While not necessary, it is recommended that players design all of the units that will be available to their empire in the new era at the same time. This "locks" the player into a slate of new units that his empire can unlock. This retains the normal tech limitations of knowing what units will be available to your empire in the current Tech Era while still giving the player the choice of the order in which the units are unlocked.

3.2.5 ▸ Tech Trading

Empires that have signed a Military treaty can engage in tech trading to exchange schematics for unit classes that they currently have available on their force lists. Acquiring schematics for an alien unit allows your empire to begin building units of that type as long as the unit has a Tech Era less than or equal to your current Tech Era.

Operating alien units is generally more expensive than relying on homegrown tech, but it's still an option in cases where an empire wants to get its hands on a unit class that can fill a role in its order of battle that is not currently being met by any of its own existing units. All of the alien units that are built using traded schematics are subject to the limitations outlined in @@ Operating Alien Units.

Tech trading can't be used to directly increase an empire's Tech Era. Tech advancement on an empire-wide scale is simply beyond the scope of a simple technology transfer, and the best that two empires can do is for the more advanced empire to "gift" the less developed world advanced units of its own construction so that the less developed power can take them home and tear them apart to study their secrets (@@ Reverse Engineering). This will speed up the less advanced empire's research efforts, but it'll still take them quite a while to catch up.

3.2.6 ▸ Operating Alien Units

An empire may end up taking ownership of units that originally belonged to another alien power. It might have purchased these units directly from that power, captured them in a battle using marine boarding teams, or seized them when they took control of enemy shipyards.

Alien units are more difficult to maintain for a number of reasons, the most obvious being that your engineers have to find a way to produce replacement parts to keep them working over the long term. This is reflected by applying a +1 modifier to the Maintenance Cost numerator of any alien unit classes that your empire operates. For example, an alien heavy cruiser that normally costs 2/3 to maintain would instead cost 3/3 to maintain when it's being fielded by another power.

In some cases an empire may also need to make extensive modifications to an alien unit to adapt it to their crews. If this is the case in your campaign setting, then newly-acquired alien units will need to be returned to base and repaired to strip out their old control and life support systems and replace them with new ones before they can be used. Ships or bases that were under construction in a system when it was captured by enemy troops must finish construction before they can undergo repairs. The unit's AS and AF are reduced to zero and it can't use any of its special abilities until these repairs are completed. The cost to convert non-flight alien units is calculated the same way as in @@ Repairs. For a flight, the conversion cost is equal to 50% of its original construction cost (round up).

It's up to the CM to decide if players need to repair captured units in this manner. It makes sense in settings where each alien species has wildly different and often incompatible physiologies. Humans are going to be hard pressed to take control of a ship that was crewed by a hive of methane-breathing arachnids whose vision is mainly in the infrared spectrum.

Meanwhile, if a human faction captures another human-built vessel, they're not going to have any life support limitations but there may be computer security lockouts that would still necessitate a repair operation to rip out the offending electronics and replace them with known good control units.

Example: The Human Commonwealth captured five Jain Swirling Eddy battlecruisers when they took the Orbital Shipyards at Kolashan. The Commonwealth is in dire need of new capital ships, so the Human player decides to finish building the ships. The Swirling Eddy class has a normal Maintenance Cost of 2/2, which increases to 3/2 when they are under Human control.

The CM has ruled that the Jains are alien enough that the Humans must pay to convert the battlecruisers for their own use. This means that on the turn after the Swirly Eddies are completed their Anti-Ship and Anti-Fighter values are both at zero and they can't use any of their special abilities. The battlecruisers must be repaired at a cost of 2 economic points each before their combat capabilities are restored to normal.

3.2.7 ▸ Reverse Engineering

Scientists and engineers can reverse engineer more advanced alien units in hopes of learning more about the fundamental technologies that are evident in their construction. An empire can reverse engineer any unit that has a Tech Era greater than its own. Alien ships must be moved to a friendly

shipyard before reverse engineering can take place, while bases can be deconstructed in planetary orbit. Once the unit is in position, the player can order teams to begin tearing it down to discover its secrets.

First, determine the Tech Era difference between your empire and the alien unit. Multiply this value by the unit's construction cost to calculate the *tech potential* for this research operation, which is the maximum amount of tech investment that your empire can earn from disassembling and studying the alien unit.

Next, roll on the Reverse Engineering Table to determine what percentage of that tech potential your empire has managed to convert into actual tech investment. Every unit that is being reverse engineered at a location makes a separate roll on the table. Round fractional tech investment values up.

Reverse Engineering Table (d6)

Roll Tech Investment Gained

1-2 25% x Tech Potential

3-4 50% x Tech Potential

5 75% x Tech Potential

6 100% x Tech Potential

Reverse engineering is a destructive process, and it's impossible to restore a unit to service after your teams have finished their job. Consequently, alien units are destroyed once reverse engineering efforts are complete.

// If the amount of tech investment earned from reverse engineering a single unit is equal to your empire's tech advancement requirement, then instead of earning tech investment your empire instead immediately earns a tech advancement! Studying the advanced alien vessel has led your scientists to make a significant breakthrough.

Example: The Lorans (Era I) have captured a pair of Tirelon Wand destroyers (Era II) and have moved these destroyers back to a friendly system to be reverse engineered.

The Wands are one Era more advanced than the Loran's own Tech Era, which when multiplied by their construction cost gives them a tech investment of 5 points.

The first destroyer rolls a 1 on the Reverse Engineering

Table (25% Tech Potential) and produces 8 tech

investment. The second destroyer rolls a 5 (75% Tech

Potential) and produces 23 tech investment, for a total

of 31 tech investment. The destroyers are then removed

from play.

3.3 ▸ Intel Phase

Intel missions and diplomacy are resolved during the Intel Phase. Any diplomatic state changes that occur during this phase take effect immediately and can have a significant impact on the events that unfold later this turn. Diplomacy is also resolved in the Intel Phase because intelligence assets often end up assisting in these diplomatic activities.

3.3.1 ▸ Intel

Intel is an abstract resource that represents the size of the intelligence network that is present in a system. Intel can be used both offensively (@@ Diplomatic Actions and @@ Intel Missions) and defensively to protect against foreign spy activity. A system can only use its Intel to assist with one diplomatic action or Intel mission per turn.

The maximum amount of Intel per system is limited by its Carrying Capacity.

3.3.2 ▸ Intel Missions

Players may spend economic points in the Economic Phase to perform Intel missions during the Intel Phase of the same turn. Any system with an Intel value greater than zero can be used to perform an Intel mission. An Intel mission order must include the type of Intel mission being performed, the system the mission is targeting, which friendly system is performing the mission. For example, a player could declare that Sol is conducting an Espionage: System mission into Wolf 359. A system may only perform one Intel mission per turn, and Intel missions cannot be performed across a restricted lane.

The cost to perform an Intel mission is equal to the Intel value of the system performing the mission plus the number of jumps separating the source and target systems. For example, it would cost 13 economic points for a 7 Intel system to perform a mission against a target system 6 jumps away.

There are three different categories of Intel missions (Espionage, Sabotage, and Propaganda), with multiple mission types available in each category. Each Intel mission type is assigned a difficulty level that affects how hard it is to successfully complete a mission of that type. This mission difficulty level is reduced by 1 if you have an active trade route in the target system. The mission's difficulty level is added to the target system's defensive Intel when resolving the mission.

3.3.2.1 ▸ Espionage

Espionage missions are information gathering operations that are used to collect intelligence on rival empires. Players can use this information to plan their future actions, be it preparing for their next great military campaign or simply keeping tabs on their neighbors.

System (Difficulty Level 1): This mission gathers basic information about the system, including its current Carrying Capacity, RAW, Census, Morale, and Productivity values.

Convoy (Difficulty Level 1): This mission reveals the number and ownership of all of the convoys that are in the target system. The player also learns what cargo (if any) the convoys are carrying, and if any of them are currently trading in the system.

Fleet (Difficulty Level 2): This mission reveals the number and type of any ships, flights, bases, and minefields in the system.

Troop (Difficulty Level 2): This mission reveals the number and type of ground forces that are disembarked in the system. Troops that are currently embarked aboard transports aren't detected by this mission.

Intel (Difficulty Level 3): This is an attempt to shadow another system's Intel resources. If successful, this mission reveals the amount of defensive Intel in the system and if the target system was used to perform an Intel mission this turn. If the system did perform a mission this turn, the shadowing player will learn the mission type and target of that activity.

Tech (Difficulty Level 4): This mission reveals the target's current Tech Year and Tech Level. If the target's Tech Year is greater than your own, you'll gain tech investment equal to X times the target system's Utilized Productivity, where "X" is the number of years that the opponent's Tech Year exceeds your own.

Schematics (Difficulty Level Varies): This mission sends spies out to steal plans for a specific unit class. The difficulty of this mission is equal to half the target unit's construction cost (round down) and must target a system with a Census greater than or equal to this difficulty level. A successful mission gives you a rough copy of the schematics for that unit. The first unit of this class that your empire builds has a construction cost twice that of normal. This class is considered to be an alien unit and its maintenance cost numerator is increased by 1 (see @@ Operating Alien Units).

Diplomacy (Difficulty Level 6): This is an infiltration at the highest levels of government that is intended to uncover any backroom deals that the target has made with other powers. This mission must target the opponent's homeworld (or highest Census system, if they don't have a homeworld). A successful mission reveals one random covert diplomatic agreement that the target empire has signed with another power.

3.3.2.2 ▸ Sabotage

Sabotage missions are used to damage or destroy an opponent's assets. During peacetime, an empire generally conducts Sabotage missions in an attempt to prevent a rival from gaining a decisive advantage. Meanwhile, in times of war, an empire uses Sabotage missions to eliminate key enemy infrastructure and keep them off balance.

Raiding (Difficulty Level 1): This mission provides clandestine support to a group of raiders to finance an attack against the target system. A successful mission guarantees that the system will be attacked by raiders later this turn (see @@ Raiding).

Troop (Difficulty Level 2): This mission terrorizes enemy ground forces that are disembarked in the target system. Planting improvised explosive devices along regular convoy routes is an easy way to bleed away enemy manpower. One random enemy ground unit in the system is destroyed.

Convoy (Difficulty Level 2): This mission destroys a convoy of the player's choice in the target system. All cargo that the convoy was carrying is also lost.

Ship (Difficulty Level Varies): This mission is a covert attack against an enemy starship using intelligence assets alone. This is often accomplished by sabotaging the ship's reactor, or stowing an explosive device away in a supply shuttle. The difficulty level for this mission is equal to the target command cost. A successful mission destroys the target starship. Any units that the ship was carrying are also lost.

Base (Difficulty Level Varies): This is an attack against enemy orbital installations in the system. The difficulty level for this mission is equal to half the target's construction cost (rounding up). A successful mission destroys the target base. If the base was a shipyard, a total construction cost of units under construction equal to the shipyard's construction capacity are also destroyed.

Counterintel (Difficulty Level 3): This is a preemptive strike against another system's Intel assets. If successful, the system's effective Intel value is halved next turn (round down). Roll a d6; on a roll of "4" or higher 1 Intel is permanently destroyed.

Productivity (Difficulty Level 3): This is an attack on the Productivity in a system. If successful, the system's Utilized Productivity is halved next turn (round down). Roll a d6; on a roll of "4" or higher 1 Productivity is permanently destroyed.

Tech (Difficulty Level 4): This mission is an attempt to hack into their computer systems and delete key research files. If successful, the target loses an amount of tech investment equal to five (5) times the system's Utilized Productivity.

Population (Difficulty Level 5): This is a cruel strike against a system's civilian population. The target system loses 1 Morale. Roll a d6; on a roll of "4" or higher 1 Census is also lost.

Sabotaging Ships & Bases

When you perform a Sabotage mission against ships or bases you get to choose an intended target for the mission. This can be a specific unit that your forces previously encountered in the system or found out about using an Espionage mission. Alternatively, the Sabotage mission can target a class of unit that you think might be in the system. For example, you might perform a Sabotage: Ship mission that targets any random *Perseus*-class heavy cruiser in the system (difficulty level 2) .

In the event that mission is successful but the intended target is not present in the system, your spies will instead target the next largest ship or base. They can never target a unit that requires a higher difficulty level mission, but they can can always target a smaller target.

3.3.2.3 ▸ Propaganda

Operatives may be directed to incite rebellions in enemy systems or conduct pro-government actions in your own systems. This allows you to directly influence Morale using only Intel. Traditionally, missions of this type are used to either raise or lower a system's Morale values, but other more specialized Propaganda missions can be used to affect even individual loyalties.

Labor Strike (Difficulty Level 1): Spies can finance local rabble rousers to act as "useful idiots" that can disrupt production in a system. A successful mission halves the system's Utilized Productivity on the next turn only (round fractions down).

Insurgency (Difficulty Level 2): This mission incites conflict by stoking the fires of political unrest among the disenfranchised. A whisper in the right ear might cause the memories of old hatreds and injustices to come bubbling back to the surface. A zealous call to action can also be used to mobilize those on the political fringe to action. A successful mission reduces the Morale of the target system by 1.

Counter-Insurgency (Difficulty Level 2): This mission is an organized pro-government propaganda campaign via every available means of mass communication (media, advertising, social networks, etc.) that is aimed at discrediting political opponents and/or suppressing the opposition's message. A successful mission increases the Morale of the target system by 1. A system's Morale cannot be improved beyond its Census value.

Diplomacy (Difficulty Level 4): This mission is used to create a casus belli (Latin for "reason for war") against the target system's owner, such as by running a "false flag" operation or fabricating territorial claims on their system. This propaganda is used to justify future aggression against their empire. Your empire gains a diplomatic modifier equal to 5% times the system's Census for the purposes of breaking treaties or declaring war against the target empire (see @@ Diplomatic Actions).

Coup (Difficulty Level 5): This mission can only be conducted in a system that is currently in rebellion (0 Morale). If successful, your empire takes control of the system. The system's Morale remains at zero, just now you're the one dealing with the loyalists that are fighting against the annexation of their territories by an outside power. This leaves the system in a precarious state and vulnerable to being retaken by another coup in the immediate future.

3.3.2.5 ▸ Resolving Intel Missions

The CM resolves all Intel missions ordered this turn and informs the players of the outcome. In a CM-less game, however, the players instead simultaneously reveal their Intel missions and then take turns resolving them. All missions are resolved simultaneously.

A player's Offensive Intel for a mission is equal to the launching system's Intel value. The target's Defensive Intel is equal to the total of the target system's Intel value, the difficulty level of of the mission, and the number of jumps separating the two systems.

To determine a mission's outcome, roll on the Intel Mission Result Table and add your Offensive Intel and then subtract your opponent's Defensive Intel from the the die roll. A Success result of "Yes" means that

the mission has been completed successfully and you receive the stated benefits from the Intel mission. A mission that rolls a Success result of "No" has failed.

There is always a chance that the target will find out about the Intel mission, whether it succeeded or not. A mission Discovered result of "Yes" indicates that enough clues were left behind to tip off the other empire and let them know all about the mission and who performed it. However, a Discovered result of "no" means that your spies got out of there without being detected.

On a modified roll of "21" or higher, your spies were not only succeeded on their mission but were also able to leave behind enough evidence to frame another empire for the mission. The target now believes that another empire of your choice is responsible for performing the Intel mission against the system. This carries the same diplomatic fallout as if that empire had performed the mission but then been discovered.

Knowing who performed a mission is not only important in moderated campaigns; being caught running an Intel mission provides the target with a diplomatic modifier in the next Intel Phase that will make it easier for them to break treaties with or declare war against your empire.

Intel Mission Result Table (d20)

Roll	*Success*	*Discovered*	*Frame*
5-	No	Yes	No
6-10	No	No	No
11-15	Yes	Yes	No
16-20	Yes	No	No
21+	Yes	No	Yes

3.3.2.6 ▸ Intel Mission Example

~~The Kili are performing an Intel mission against a Brindaki world that has 5 Intel. The Kili have 3 Offensive Intel on the mission. The Kili player rolls a d20 and gets a 12. He adds his Offensive Intel (3) and subtracts the Brindaki's Defensive Intel (5) to get a modified die result of 10. The Kili mission failed, but they were not discovered.~~

~~Example: The Senorians are trying to destroy a Loran shipyard (difficulty 10). The Lorans have 5 Defensive Intel in the target system, but the Senorians have 7 Offensive Intel on the mission. The Senorians roll a 17 + 7 Offensive Intel - 9 Defensive Intel (5 Intel, 4 CC) = 15 for the mission roll. The mission was a success, but the Senorians were discovered.~~

Diplomatic Contact

You cannot engage in diplomacy with or launch Intel missions against a power with which you have not established contact.

3.3.1 ▸ First Contact

First contact takes place when an empire moves a fleet into a system that contains fleets or other assets belonging to another power. ~~Empires always start in a state of Non-Intercourse upon making first contact. It is up to the players to decide how their relationship develops from here. One side or the other can try and start a "first contact war" by attacking the newly-discovered opponent during the @@ Encounters Phase this turn, or they could pursue normal relations and open up negotiations to advance their relationship.~~

3.3.2 ▸ Sustained Contact

Powers can only negotiate with one another if they have sustained diplomatic contact. This requires that the empires can trace a path of jump lanes between two of their systems that doesn't pass through any systems that contain an enemy fleet or that are controlled by an enemy empire. Diplomatic couriers can safely move back and forth between two empires without being interdicted by hostile forces as long as these conditions are met. Control of adjacent systems guarantees sustained diplomatic contact, but it is obviously not required.

Sustained contact between two empires is lost if they can no longer trace a path of jump lanes between their systems due to an enemy presence. This loss of diplomatic contact means that the empires will no longer be able to sign treaties or conduct other diplomacy together until the diplomatic link is restored.

3.3.3 ▸ Diplomatic Vessels

Empires often employ dedicated Diplomatic cruisers that can be dispatched to faraway systems to carry out diplomatic negotiations with distant nations that they are not otherwise in contact with. This keeps the lines of communication open between their worlds and lets them continue to conduct diplomacy, albeit in a more restricted fashion. Diplomatic ships must be in a system that is controlled by the opposing empire in order to establish and maintain diplomatic contact in this manner.

Diplomatic States

The most important aspect of diplomacy is establishing the level of relations you wish to have with other empires. There are a variety of diplomatic states
two powers can have. But the most important
status is having established contact or not.

War

Non-Intercourse

- Do not have diplomatic contact; must rely on Diplomatic vessels to negotiate
- Default starting diplomatic state

- Do not recognize boundaries and can freely move fleets into or out of systems controlled by the other empire. Your fleets may not generate encounters in or invade systems controlled by the other empire. It may demand scenarios against an opponent that generates an encounter against you, however.

Non-Aggression

- Neither side is allowed to move fleets through systems belonging to the other empire.
- Should you encounter fleets belonging to a Non-Aggression partner, you may not generate encounters against their fleets.

Trade

- Allow both empires to move civilian convoys through the other's systems.
- Allows foreign trade routes.

Military

- Allows military fleets to move through the other's systems.
- Allows use of the opponent's supply depots to keep your forces in supply.
- Allows tech trading

Mutual Defense

- Declaration of war on Defense partner is repeated on Defense partners; but not vice versa

Alliance

- If you declare war on someone, all of your allies are also at war with them

Partnership

Have full access to the other's force lists, with no alien unit penalties

Empire with the smaller economy becomes a junior partner, and the Partnership leader is now in charge of diplomacy

Unification

Two empires become one

Tension

- 0-100 spectrum
- Back port Tension to the core diplomatic rules
- Tension then works as the key diplomatic modifier
- Automatic declaration of war when Tension reaches 100
- Automatic armistice when Tension reaches 0

Diplomatic Modifiers

- Empire implicated in an Espionage mission (+10 Tension)
- Empire implicated in a Sabotage/Propaganda mission (+20 Tension)

- Empire has signed a treaty with a friendly power (-5 Tension)
- Empire has signed a treaty with an enemy power (+5 Tension)
- Empire has declared war on a friendly power (+10 Tension)
- Empire has declared war on an enemy power (-10 Tension)
- Empire broke a treaty with you (+10 Tension)
- Empire has generated an encounter against your fleets (+1 Tension per construction cost of units destroyed)
- Empire has bombarded your colony (+1 Tension per bombardment point used)

Diplomatic Actions

There are four basic diplomatic actions: offering, signing, breaking, and declaring.

Diplomatic State	*Treaty Chance*	*Breaking Chance*	*Declaration Chance*
War	N/A	N/A	N/A
Non-Intercourse	N/A	N/A	0%
Non-Aggression	70%	20%	-20%
Trade	60%	10%	-40%
Military	50%	0%	-60%
Mutual Defense	40%	-10%	-80%
Alliance	30%	-20%	-100%
Partnership	20%	-30%	-120%
Unification	10%	N/A	N/A

Offering a Treaty

Treaty Chance - Tension must be > 0 to offer a treaty

Signing a Treaty

Free action, can sign as long as Treaty Chance - Tension is > 0

Signing is a free action. You may sign any treaty you wish with no cost and no chance of failure.

Breaking a Treaty

Breaking Chance + Tension is base chance of success

Unless the other members of the treaty allow a power to withdraw, it can only end the treaty by breaking it. Breaking has a chance of failure dependant on the type of treaty, various other factors, and Intel spent.

You cannot break or withdraw from a treaty that is serving as a prerequisite for another treaty. You must first break or withdraw from all treaties on which it depends. The base percentage chance to break or withdraw from a treaty is listed in parenthesis next to the treaty in 3.4.3.2 Diplomatic States. The modifiers shown in Exhibit B: Diplomatic Action Modifiers apply only if the condition stated occurred or existed while the treaty was in effect. Never apply a penalty to breaking a treaty that is a result of having the treaty you are trying to break. That effect is already factored into the base difficulty.

Declaring War

Tension

Declaring also requires a check for success. It may be hard to persuade your own internal groups to go along with the declaration. So, dependent on circumstances and Intel points spent, a declaration could fail.

Non-cumulative bonuses or penalties do not stack with other non-cumulative bonuses or penalties. Always use the highest applicable bonus AND penalty to a roll. Do not apply a penalty for a treaty you're taking action against. For example, if you are trying to break a Trade Treaty with an Alliance Partner you receive a –50% penalty to the attempt, but if you try and break the Alliance Treaty itself (which applies to all Alliance partners) you only receive a –30% penalty for your current Mutual Defense Treaty or Treaties. Roll a d100 under the percentage chance to succeed in all cases.

Diplomatic Intel

- May use Intel to improve chances of breaking/declaring
- Cost is equal to Intel value of system
- Only one system can assist on each diplomatic action
- Bonus is equal to 5% per Intel

Armistices

100 - Tension

3.3.7 ▸ Co-Belligerency Pacts

Powers that have a diplomatic state of at least Non-Aggression and are at war with the same enemy can sign a Co-Belligerency pact to form an ad hoc alliance to counter the shared threat. This agreement allows their military forces to fight together as if they were Mutual Defense partners or members of the same Alliance. Specifically, the empires field a single, unified Task Force whenever they fight together against their common enemy. Co-Belligerents can also support each other's ground forces when they are trying to capture or garrison enemy systems.

This cooperation between Co-Belligerents does not extend beyond the shared operations theater, however. An empire can only move fleets into a Co-Belligerent's systems without withdrawing if they have received specific permission from that opponent or if the system was previously controlled by the common enemy. They also can't land troops in systems that the Co-Belligerent controls unless the system was previously enemy controlled. The empires can work together in the enemy's current and former territories, but their individual borders remain sacrosanct.

A Co-Belligerency pact remains in effect until it is broken by one of the powers or it automatically expires because the powers are no longer at war with the same enemy. This emphasizes that this is a temporary arrangement between two powers, and building a more permanent relationship requires the players to advance their diplomatic state.

3.3.8 ▸ Covert Diplomacy

Not all diplomatic negotiations are carried out in the public eye, or with official sanction by the governments involved. Empires often engage in such covert diplomacy when they want keep their political dealings hidden from their rivals.

3.3.8.1 ▸ Covert Treaties

Empires have the option of negotiating secret treaties with each other. Whenever a player offers a treaty to an opponent, he may indicate that this is a covert diplomatic action. This treaty is being offered and negotiated in secret and, if signed, its existence will be kept a closely guarded secret by both parties. Only those two players will know that their empires have signed the treaty, and it won't be publicly revealed to their opponents. As far as they are concerned, the two empires still are in the same diplomatic state that they were before the treaty was signed. The empires may choose at any time to reveal the existence of their new treaty, however they are only required to do so when they are performing a public action that would require them to be in that diplomatic state.

3.3.8.2 ▸ Covert Declarations

Similarly, an empire may attempt to make a covert declaration of war against an enemy. This covert diplomatic action incurs a penalty of -40% to an empire's chance of successfully declaring war. If the covert declaration is successful, the empire will secretly be in a state of War with that enemy power. This gives the empire's military the go ahead to start moving into position to prepare to launch a sneak attack against the enemy. The fact that the two empires are at War doesn't have to be revealed until the invasion begins. For example, if one Trade partner secretly declares war on the other, the empires will continue trading with each other normally until the first shots are fired.

Secretly declaring war on an opponent so that you can perform a sneak attack on them is seen as a dishonorable move in diplomatic circles, and empires gain a +20% bonus to their attempts to break treaties with or declare war against powers that commit these kinds of attacks.

3.3.8.3 ▸ Uncovering Covert Diplomacy

Empires may use Intel missions to attempt to uncover covert diplomatic arrangements that other powers have signed with one another. A successful Espionage: Diplomacy mission reveals the particulars of one covert diplomatic actions (treaty or declaration) that the target empire had made and is now trying to

keep hidden. This action is chosen at random from the selection of covert diplomatic actions that the target has yet to reveal to its neighbors.

3.3.2 ▸ Diplomatic Contact

3.3.3 ▸ Diplomatic States

Diplomatic states define the current level of diplomatic relations between two powers. These diplomatic states represent an advancement of relations from the most dire (War) to the most harmonious (Unification). Empires begin in a state of Non-Intercourse immediately after first contact and the actions that players take during the game will adjust their diplomatic state up or down from there. Each positive diplomatic state (Non-Aggression and higher) builds upon the last. For example, empires that have a Military treaty also benefit from the effects of Non-Aggression and Trade.

3.3.3.1 ▸ War

This is a formal and clear declaration of war against another power. Empires in a state of war are free to conduct unrestricted warfare, which includes all of the effects of a state of hostilities with the addition that a declaration of war allows you to use ground forces to invade enemy controlled systems. A state of war will exist until one empire is conquered or both sides agree to an armistice. Signing an armistice will restore the empires to normal relations.

3.3.3.2 ▸ Hostilities

The two empires are engaged in a cold war that could go hot at any moment. Empires that are in a state of hostilities may send their fleets across the border to generate encounters against enemy fleets, destroy their bases and other defenses, and even bombard their colonies, but hostilities does not allow for the commitment of ground troops for the invasion of any system. Hostilities does permit an empire to destroy an enemy colony using orbital bombardment and then recolonize it.

3.3.3.3 ▸ Normal Relations

Once either player makes contact, relations are established at this diplomatic state. Normal relations does not recognize empire's borders and you can freely move fleets into or out of systems controlled by the other empire. Your fleets may not, however, generate any encounter scenarios in or attack systems controlled by the other empire. However, the system's owner may still generate encounter scenarios against your fleet.

~~There are two exceptions to this rule. If any of your forces in a system are attacked by a power at normal relations with you, then your forces in that system may generate scenarios or attack that opponent's forces in that system for this campaign turn. If you previously controlled or currently control a system, your military actions against powers at normal relations in those systems are unrestricted (unless a system is or was part of another power's recognized borders after the last time you owned it).~~

3.3.3.4 ▸ Non-Aggression

The empires have signed a formal agreement to respect one another's territorial boundaries and refrain from engaging in hostilities. Your fleets cannot generate encounters against empires that you have a non-aggression pact with. Neither side is allowed to move fleets through a system that is controlled by the other empire without explicit permission. Any fleet that accidentally enters a system that is controlled by a non-aggression partner must immediately move out of the system on its next turn. Their fleets can remain in a neutral system without incident, however. Diplomatic vessels are given diplomatic immunity and may remain in another empire's territories even if they would normally be compelled to leave by the terms of the non-aggression treaty.

3.3.3.5 ▸ Trade

Relations have improved to a point that the empires allow foreign convoys to cross over the border into their territories for the purpose of trade. An empire's convoys can establish @@ Trade Routes in systems that are controlled by their trade partners.

If a trade treaty is broken by an event other than a declaration of war, all of your empire's convoys that are currently in your opponent's controlled systems must immediately begin moving towards the nearest friendly or neutral system.

3.3.3.6 ▸ Military

A military treaty authorizes the empires to establish closer military ties. One of the key benefits of a military treaty is the ability to use the military partner's supply depots to resupply your empire's own forces. This represents that your empire is leasing facilities and establishing military supply bases in the opponent's space. Your empire may also not move fleets into and through systems controlled by the other power. Finally, the agreement allows empires to engage in @@ Tech Trading, buying and selling military units or class designs. Note however that all such units are subject to the @@ Operating Alien Units maintenance penalty due to being of foreign design.

3.3.3.7 ▸ Mutual Defense

A mutual defense pact is a collective security agreement in which the empires agree to come to each other's aid if they are attacked by a third party. If an enemy declares war on one of the empires the other will automatically reciprocate the declaration of war. All of the treaties that the defender has signed with the aggressor are immediately broken. It is important to stress that the terms of a mutual defense pact can't be invoked when one of the partners declares war, only when war is declared upon them. This is strictly a defensive alliance.

During times of war, they may also garrison troops in systems that their defense partner controls. This makes it easier for them to fight a defensive war against a common enemy.

3.3.3.8 ▸ Alliance

Forging an alliance with another power is a major step forward in diplomatic relations. The two powers have come to trust each other implicitly and are prepared to stand and protect one another through thick and thin. Any declarations of war that an alliance member makes or that are made against it are automatically reciprocated by all of its other allies. An attack against one is an attack against all. If one of

your allies declares war on another ally, your empire will join the war on the side of the ally that war was declared against.

The threat of immediate allied retaliation usually serves as an adequate deterrent against attack except in cases where an enemy state or allied bloc is prepared to spark a massive interstellar war in order to achieve their goals.

A declaration of war by a member of the alliance on another power does not, however, result in an automatic declaration of war by the rest of the alliance members. However, every alliance member is required to attempt a declaration of war each turn until they succeed or an Armistice is signed that ends the conflict. Other members of the alliance can choose to spend Intel Points to increase the chance of a successful declaration of war by another alliance member. (Note: This can result in alliance members being dragged into a war they don't want by their alliance partners... beware unwanted foreign entanglements).

- If you declare War on someone, all of your allies declare War on them, too.
- If one of your Allies declares War on another Ally, you will join the War on the side of the Ally that War was declared against (defensive alliance).
- Alliance member that controls the most systems is the Alliance leader and is in charge of negotiating the armistice to end the war.
    - To sign a separate peace, an empire would have to break its alliance first

3.3.3.9 ▸ Partnership

Partnership is the final step in cooperation between empires.

- Close relations, can build each others designs without the alien ships maintenance penalty
- Junior partner gives diplomatic control to its partner; cannot conduct diplomacy independently
    - Still rolls for diplomatic shifts with its partner, in case the relationship sours and they want to return to a simple Alliance

3.3.3.10 ▸ Unification

- NAW merges with the player empire and is officially removed from play

3.3.4 ▸ Friends & Enemies

Empires are *enemies* if they are in a state of war or hostilities, *neutral* if they are in a state of normal relations, or *friendly* if they are in a state of Non-Aggression or higher. These terms are used throughout the rules to determine if an opponent is potentially hostile to your empire.

3.3.5 ▸ Diplomatic Actions

3.3.5.1 ▸ Signing Treaties

3.3.5.2 ▸ Breaking Treaties

3.3.5.3 ▸ Declaration of War

Diplomatic Modifiers

Caught running an Espionage mission (+10%)

Caught running a Sabotage mission (+20%)

Caught running a Propaganda mission (+30%)

Generated a space battle this turn (+20% per battle)

Violated border by moving military units into a system without a Mutual Defense treaty (+10% per incursion)

3.3.6 ▸ Armistices

All alliance members must agree on any armistice signed with an enemy. To sign a separate armistice, an empire must first withdraw from or break the alliance treaty.

3.3.9 ▸ Non-Aligned Worlds

Non-aligned worlds are minor powers that are not formally aligned with or against any of the player empires. The goal of the non-aligned worlds is to remain officially neutral in the conflicts between the major powers and maintain their independence.

As a rule, non-aligned worlds are rarely interested in expanding or warring with major powers.

3.3.9.1 ▸ Discovering Non-Aligned Worlds

Scout fleets have a chance of discovering new non-aligned worlds as they explore the galaxy (see @@ Jump Lane Exploration). Any newly-explored system that receives the *Homeworld* special trait is the home of a new non-aligned world. Randomly choose a sample empire to determine which force list this

new empire will use. The non-aligned world always has a starting Tech Year equal to the current campaign year.

Each new non-aligned world has a total construction cost of starting forces equal to five (5) times its system's output (RAW x Utilized Productivity). These starting points are used to purchase units off of the empire's force list. These starting forces begin play at the non-aligned world's homeworld.

3.3.9.2 ▸ Non-Aligned Governments

- Simplified personality system from MOO1, with modifiers that give them just enough personality to be interesting without requiring a lot of extra work. Helps dovetail into the mission system.

Non-Aligned Personality Table (d6)

Roll	*Personality*	*Effect*
1	Aggressive	-1 modifier to diplomatic shift rolls when in a diplomatic state below Military.
2	Pacifistic	+1 modifier to diplomatic shift rolls when in a diplomatic state below Non-Aggression.
3	Honorable	
4	Ruthless	
5	Xenophobic	-1 modifier to diplomatic shift rolls when in a diplomatic state above Normal Relations.
6	Erratic	Once every 12 turns roll on this table to randomly determine the non-aligned world's current personality (re-rolling Erratic results).

Non-Aligned Strategy Table (d6)

Roll	*Personality*	*Effect*
1	Diplomat	Focuses on establishing trade routes with friends and performing Intel mission against enemies. Has a balanced approach to spending on Intel, Productivity, tech investment, and military production.
2	Ecologist	Focuses on terraforming and using Intel to improve Morale at existing colonies. (Bases and Minefields)
3	Expansionist	Focuses on exploring jump lanes and colonizing new systems. Income is largely spent building Scouts, Explorers, and convoys to maintain growth. Not afraid to go to war to capture enemy territory.

4	Industrialist	(Productivity, Infrastructure)
5	Militarist	Military unit production
6	Technologist	(Tech investment, building advanced military units)

3.3.9.3 ▸ Non-Aligned Diplomacy

Non-aligned worlds begin in a state of normal relations upon first contact with another empire. On each subsequent turn the non-aligned world rolls on the following table to determine what change (if any) it has made in its relationship with the other empire. Cumulative modifiers only apply until a diplomatic state change occurs, at which the modifiers are reset to zero. Non-aligned worlds tend to prefer stability in their foreign relationships and only make adjustments to the political situation only rarely.

Non-Aligned Diplomacy Table (2d6)

Roll	*Diplomacy Effect*
2-3	Diplomatic Incident: Reduce diplomatic state by one level.
4-5	Tensions Increase: Cumulative -1 modifier to future rolls on this table.
6-8	Status Quo: No Effect.
9-10	Promising Results: Cumulative +1 to future rolls on this table.
11-12	Diplomatic Breakthrough: Increase diplomatic state by one level.

Player empires have more political clout and can influence their non-aligned neighbors using Intel missions. A successful Propaganda: Coup mission targeted against a non-aligned homeworld allows an empire to raise or lower the target's diplomatic state with any given power by one level. You could use this mission to improve the non-aligned world's relations with your own empire or sabotage its relationship with one of your rivals.

3.3.9.4 ▸ Running a Non-Aligned World

In CM-less games, a non-aligned world is controlled by the player whose empire has the highest diplomatic state with them. The player with the smaller empire (by total system output) wins any ties.

3.4 ▸ Movement Phase

Players move their fleets and have encounters during the Movement Phase.

3.4.1 ▸ Fleet Movement

Fleet of ships can move along jump lanes from one system to another. Fleets may normally move through one (1) jump lane per turn, or two (2) jump lanes per turn if one of them is a major lane. The fleet may cross this major lane at any point in its movement. Restricted lanes are harder to navigate, and fleets may move through one (1) restricted lane per turn so long as one ship in the fleet has the Scout or Explorer special ability. ~~This typically limits the use of restricted lanes to military ships.~~

Ships that are crippled, out of supply, or have the Slow ability may only move through one (1) jump lane per turn, however. Fast ships may move through an additional minor or major lane per turn at the end of their normal movement. Fleets always move at the speed of the slowest ship in the fleet.

Players simultaneously record movement orders for all of their fleets to perform this turn. Once all players have finished recording their orders, the players simultaneously resolve the movement orders by having each fleet move through one jump lane at a time, checking after each move to see if an encounter has been generated (see below). Continue until all fleets have finished moving.

When two opposing fleets meet in the same system or jump lane during the Movement Phase, the players take turns deciding whether or not they want to generate an encounter at that location this turn. After each player moves a fleet one jump, if that fleet is in the system with another player's fleet then either player may choose to generate an encounter in that system. However, a player cannot generate an encounter against an opponent that his empire has a Non-Aggression treaty with.

Generating an encounter causes the affected fleets to immediately stop moving. They'll remain at the encounter location for the remainder of the turn unless they use contested movement (see below) to continue moving. Encounters are resolved in the @@ Encounter Phase.

3.4.X ▸ Contested Movement

Enemy ships exert a zone of control (ZOC) in an encounter location that can prevent your fleets from moving past them. To continue moving, a fleet must leave behind a number of friendly ships equal to the number of enemy ships in the encounter. For example, if your fleet has 17 ships and the enemy fleet has 5 ships then you'd have to leave at least 5 ships in the encounter location in order for the rest of your fleet to keep moving.

Each minefield counts as ships for the purposes of contested movement. These strategic weapons are specifically designed to interfere with the advance of enemy fleets as they are forced to slow down to safely pass through the minefield. Minefields that are being carried on Minelayers do not have any effect on contested movement. Only minefields that have been previously deployed to a system can affect movement there this turn.

CM's Note: *The contested movement rules cover situations where your fleet might run into a single enemy corvette but you want your fleet to keep moving to complete the rest of its movement orders. Being able to leave behind a minimal force to deal with the lone corvette makes more sense than forcing the entire fleet to stop and deal with this one ship.*

3.4.2 ▸ Stealth & Concealment

Stealth ships can avoid detection by opposing forces and remain concealed as long as they aren't detected by enemy Scouts. This allows Stealth ships to gather intelligence on other alien forces in a system without generating an encounter.

Scouts use their long range sensors to detect enemy Stealth units that are at the same system or jump lane location. The number of Scout functions that are required to detect a Stealth unit is equal to its Stealth value. Units with lower Stealth values are detected before those with higher Stealth values. Detecting a Stealth unit nullifies its advantages this turn.

Stealth units that are undetected during the Movement Phase gain the First Strike special ability during the @@ Encounters Phase this turn to represent that they can perform sneak attacks against enemy fleets. The units are decloaking at close range and unloading their firepower before their targets can properly react to the situation.

Stealth vessels that successfully conceal their presence from an opponent don't have to engage in combat this turn. They can be held in reserve and opt out of any space combat scenarios that are generated at their location this turn. This gives a player the chance to hide out in a system and gather intelligence on enemy fleet movements without his opponent even knowing that his ships are there!

Stealth ships that are concealed in a system can't be used to blockade a system unless there aren't any defenders in the system in the Supply Phase when blockade conditions are checked. ~~They can only contribute to the blockade if they reveal their presence before the end of the Encounter Phase this turn.~~

Example: A Senorian fleet containing 1 Abomination battleship (Stealth 4) and 4 Nightmares heavy cruisers (Stealth 2) has moved into a system that contains a Kili fleet. The Kili have 4 Riposte scout destroyers (1 Scout each) in the system. This gives the Kili 4 scout functions to use to detect Stealth ships. The Senorian player decides to reveal the presence of 2 Nightmares to the Kili while keeping the presence of the other Nightmares and the Abomination a secret. These undetected ships will double their AS and AF values on the first round of every battle they fight against the Kili in the system this turn.

3.4.4 ▸ Jump Lane Exploration

Explorers are routinely sent out on exploratory missions to chart previously unexplored jump lanes and discover strange, new alien worlds.

3.4.4.1 ▸ Exploration Fleets

An exploration fleet goes out into the unknown to map unexplored jump lanes and try to find new star systems. Any fleet that contains one or more Explorers can serve as an exploration fleet and make

exploration attempts to try and survey unexplored jump lanes this phase. Each Explorer has a number of Explorer functions equal to its command cost. This reflects that larger Explorer ships are more effective in the deep range exploration role.

3.4.4.2 ▸ Exploration Attempts

Exploration fleets that did not perform any other movement this phase may now roll on the Exploration Attempt Table to try to explore any unexplored jump lanes that are present at their system locations. Exploration attempts cannot be made in systems where encounters were generated earlier this phase. The maximum number of exploration attempts that an empire can make in a system this turn is equal to the number of unexplored lanes connecting to the system.

The exploration fleet receives a bonus to the attempt equal to the highest Explorer value in the fleet, and an additional bonus of +1 per 2 Explorer functions provided by other Explorers in the fleet (round fractions down). Exploration bonuses provided by outstanding leaders or random events are added to a unit's Explorer value prior to calculating this bonus. A natural result of "1" on the Exploration Attempt Table always puts the exploration fleet in peril regardless of the die roll modifier (see @@ Exploration Fleet in Peril).

Exploration Attempt Table (d10)

Roll	*Effect*
4 or less	Exploration Fleet in Peril
5-10	No Effect
11+	Jump Lane Explored

Example: An exploration fleet contains an Explorer battleship (CC 3), an Explorer light cruiser (CC 2), and three Explorer corvettes (CC 1). The highest rated Explorer in the fleet is the battleship (+3). The remaining 5 Explorer functions provides an additional +2 bonus to the roll, for a total die modifier of +5.

The fleet rolls on the Exploration Attempt Table and the result is a "5". The fleet adds its +5 modifier to increase the roll to a "10", unfortunately this isn't enough to successfully explore the jump lane. The exploration fleet has spent the turn exploring the area of deep space but simply came up empty. The fleet will have to hope for better luck next turn.

3.4.4.3 ▸ Exploring a New System

After successfully exploring a jump lane, pick an unexplored lane at the exploration fleet's current location and move the fleet across to the unexplored system on the other end of that lane and then use the @@ System Generation rules to generate statistics for the new system. The exploration fleet has performed a planetary survey in this new system, revealing its statistics to their empire as well as the number and position of any additional jump lanes that connect to the new system. It is likely that one or more of these jump lanes will be unexplored, offering the exploration fleet additional opportunities to continue exploring next turn.

Finally, roll on the Jump Lane Class Table (pg X) to determine the class of the jump lane that the exploration fleet has just explored. This step is saved for last because you need to know the system importance of the systems at both ends of the lane before making this roll.

3.4.4.4 ▸ Exploration Fleet in Peril

Exploration is inherently dangerous, and there's always a chance that an expedition will find itself in peril. Affected exploration fleets find themselves in danger of becoming hopelessly lost in hyperspace. All ships in the fleet immediately gain 1d6 out of supply levels as they race to find a safe path back home. Any ships that have their Defense Values reduced to zero as a result of these out of supply levels are lost. Any flights or other cargo these units were carrying when they were destroyed are also lost.

3.4.5 ▸ Trade Routes

A trade route can be created by moving a convoy into a system and ordering it to begin trading there. You may operate a trade route in any system that your empire controls, but you must have a Trade treaty with another empire power before you can create a trade route in their systems. A convoy can only maintain a trade route if it is not crippled and it can trace a path of jump lanes back to a friendly supply depot that doesn't pass through any systems that contain enemy fleets or are controlled by empires that you don't have a Trade treaty with. After the trade route is created, the convoy must remain in the system to maintain the route and coordinate the shipment of goods back and forth to your supply depot.

An active trade route produces income equal to the system's Utilized Productivity, +1 per trading post in the system. The trade route remains active as long as the assigned convoy isn't crippled and it can still trace a safe path back to a friendly supply depot. Due to trade saturation, an empire may only have one active trade route in each system.

3.4.6 ▸ Moving Cargo

Convoy Transport Capacity

A convoy has a transport capacity of 10, which means it can carry up to 10 size of cargo. Units that can be moved as cargo have a size rating that determines how much transport capacity they require. By default, most units have a size equal to their construction cost.

Bases are an exception to this rule, and they have a size equal to twice their construction cost. For example, a corvette-sized orbital defense satellite with a construction cost of 2 points would be a size 4 unit when moved as cargo.

Multiple ships or convoys can combine transport capacity to carry larger items, but if any of the units are destroyed the entire cargo is also lost. Also, the separate "pieces" of the unit must be transported at the same time. For example, a single convoy cannot take half of a unit, drop it off, and then return for the other half.

Units carried as cargo may be disembarked in a system owned by the player's empire or one of its Military partners. Bases and minefields may also be deployed from their transports into a system even if it is currently uncontrolled, and these defenses are considered fully functional once they are deployed.

Cargo is disembarked during @@ Landings & Deployments in the Ground Combat Phase later in the Sequence of Play.

Moving Census

Census has a size of 10 and can therefore be carried on a single convoy. Picking up a Census from a system reduces its Census by 1. Census carried on convoys can only be disembarked in systems that already have Census. Unloading a Census increases the system's Census by 1.

3.4.X ▸ Moving Ground Forces

Assault ships and convoys are used to move ground forces from system to system. A ground force has a size equal to its construction cost. A convoy has a transport capacity of 10, which means it can carry up to 10 construction cost of ground forces. Each Assault ship has a transport capacity equal to its Assault rating for the purposes of moving ground forces. Typically, Assault ships will only be able to carry a ground force if multiple ships are involved.

Moving Other Units

Moving other units (such as flights, bases, or minefields) is handled very much like moving ground forces, except that only convoys or dedicated Supply ships may be used to carry units other than ground forces. Supply ships have a transport capacity equal to their total Supply functions when they are used to move cargo.

3.4.X ▸ Movement Phase Example

A fleet in Sol needs to move to Leonis. The fleet contains all undamaged ships that can move through up to two (2) jump lanes per turn.

On the first turn, the Human player plots movement orders for the fleet. The first jump will be from Sol to Centauri over that major lane. This lane doesn't count against the fleet's basic movement limit because a fleet can always move through one major lane per turn without affecting its other movement.

The next jump will be from Centauri to Indi, and the last jump will be from Indi to Sirius. While there is a major lane between Sirius and Leonis, the fleet has already made its one free major lane move for the turn. It will have to wait until next turn to make its final jump from Sirius to Leonis.

3.6 ▸ Supply Phase

Fleets and armies require a constant stream of supplies and personnel to maintain their combat readiness. Supply is checked in this phase to see if any units are currently out of supply. This will affect the units during any battles that they participate in later this turn. Rolls are also made to check for raider activity in case any new raiders fleets are on the prowl.

3.6.1 ▸ Supply Depots

Empires rely on orbital supply depots to keep their fleets and troops resupplied. Supply depots are purchased and deployed like any other base, but they serve a special purpose in that they turn the system they are located in into a supply point for their owner. Units that can trace @@ Basic Supply Routes or @@ Extended Supply Routes to a supply depot are in supply and won't earn any out of supply levels this turn. Supply depots can also be used to perform @@ Field Repairs on damaged ships, convoys, and bases.

Supply depots can be attacked like any other base in a @@ Defensive Scenario. They have DV 10 but all other combat factors (AS, AF, CV, CR) are at zero. As a result, supply depots are vulnerable to enemy attack and players must be sure to properly defend their supply depots against enemy attack. A successful deep strike against a strategically-placed supply depot can easily cut off supply to fleets and troops fighting on the front lines in nearby systems, with potentially catastrophic results.

A supply depot remains active and operational as long as it isn't crippled. Repairing a crippled supply depot restores it to a fully-functional state.

In addition to standard supply depots, any base with the Supply Depot special ability also acts as a supply depot at its location. All of the benefits and limitations that would normally apply to a supply depot also applies to these special military units.

- Supply Depots are orbital bases (DV 10) costing 20 EP and maintenance of 1/1

3.6.2 ▸ Basic Supply Routes

Supply routes represent the transparent flow of civilian and military freighters that move back and forth through your empire. A basic supply route has a length of 2 jump lanes and cannot cross restricted jump lanes or pass through a system that contains enemy fleets. A basic supply route can still be traced into a system that contains enemy fleets, however. Units that can trace a basic supply route back to a friendly supply depot are considered in supply this turn and remove all out of supply levels and used conditions.

3.6.3 ▸ Extended Supply Routes

Fleets or systems that are out of supply can use Supply ships to establish an extended supply route back to a friendly supply depot. The maximum length of this extended supply route is equal to the total Supply functions in the system. For example, if you have 4 Supply in a system you could trace an extended supply route to a friendly supply depot that is up to four jumps away. Extended supply routes cannot be traced through a system that contains enemy fleets, however they can be traced across

restricted jump lanes. Scout fleets are often accompanied by Supply ships for this reason: it allows them to remain in supply even when they are operating out on the frontier.

Extended supply routes makes it easier to plan deep range military operations because you can make sure to attach enough Supply ships to your fleet to keep them in supply during their expedition. However, extended supply routes do leave you more vulnerable to being forced out of supply if an enemy force moves in and cuts your supply route. This can be extremely devastating if your supply route is disrupted when a fleet is operating deep in enemy territory. The out of supply fleet would be forced to race for home and fight its way through the enemy fleets that are blocking its supply lines as more and more ship systems start to fail due to lack of supply.

3.6.4 ▸ Blockades

A system is blockaded when the number of enemy ships in the system is greater than the number of friendly ships. The minimum number of ships required to maintain a blockade is equal to the system's Census. A blockaded system and all friendly units located there (including ground forces) are out of supply unless there is an operational supply depot present to keep them supplied. A system's output is reduced to half that of normal when it is blockaded (round down). The maximum economic point cost of purchases that can be made in the system is equal to this reduced output value because it is cut off from outside resources.

Friendly fleets that are in a blockaded system are trapped within the blockade. The only type of scenario that they can demand in an encounter is a @@ Breakout Scenario against the blockading enemy fleet.

Blockades are typically used to wear down a planetary population and its defending troops until troops arrive to begin a proper invasion.

Blockade Runners

Blockade Runners are able to run enemy blockades and keep basic supply routes running.

The number of Blockade Runners needed to maintain the supply route is equal to X. For example, Y.

//If a system that normally could trace a basic supply route is unable to do so because of an enemy fleet, Blockade Runners can be used to keep the supply route open.

//the number of Blockade Runners required to keep the supply running is equal to the number of enemy ships minus the number of friendly ships along the basic supply route; for example, if there are 10 enemy ships and 4 friendly ships, then you'd need 6 Blockade Runners to maintain the supply route.

// cannot be used to maintain an extended supply route

CM's Note: *Corvette-sized atmospheric blockade runners are particularly useful because they are cheap and can be built by planetary industry in systems out on the frontier. This allows players to quickly build ships to keep supply routes open or build replacements if existing blockade runners are lost.*

3.6.5 ▸ Out of Supply

Units that can't trace a supply route back to a friendly supply point will be out of supply this turn. Out of supply units earn an extra out of supply level for every turn that they spend out of supply. The effects of being out of supply vary depending on the type of unit that is out of supply:

- **Ships** subtract 1 point from their DV, AS, and AF values for each out of supply level they currently have. A ship's AS and AF cannot be reduced below half their starting value as a result of being out of supply, however. A ship is scuttled (destroyed) and immediately removed from play if its DV is reduced to zero as a result of being out of supply. Ships that are out of supply are running low on fuel and are forced to conserve fuel, reducing them to a movement rate of one (1) jump lane per turn as described in @@ Basic Movement Rate.
- **Flights** are affected by out of supply levels a bit differently than ships. For each out of supply level, a flight must subtract 1 point from either its DV, AS, or AF value, whichever is higher. If the values are the same, the player decides which is reduced. A flight is destroyed when its DV is reduced to zero. Out of supply flights may not perform @@ Carrier Strikes.
- **Bases** are more resilient to being out of supply. Bases only subtract 1 point from their DV, AS, and AF values for every full 2 out of supply levels. As with ships, a base's AS and AF values cannot be reduced below half their starting value as the result of being out of supply and it is destroyed if its DV is reduced to zero.
- **Minefields** are specially designed for long term deployment and are never out of supply.
- **Missile** units do not receive any benefits from their equipped ordnance packages and cannot reconfigure them this phase when they are out of supply.
- **Ground** forces lose 1 Attrition for every full 2 out of supply levels they have received. A ground unit is destroyed when its Attrition reaches zero. They don't suffer any penalties to their other combat stats as the result of being out of supply.

3.6.6 ▸ Emergency Resupply

Supply ships that are unable to trace an extended supply route have the option of exhausting their remaining supply stores to keep their system in supply. The Supply ship performing the emergency resupply action is immediately crippled to represent that it has been stripped bare to recover every last consumable and crew possible. All friendly units in the system then lose a number of out of supply levels equal to the unit's Supply value.

The decision to have a Supply ship carry out an emergency resupply operation is made before units are removed due to being terminally out of supply.

3.6.7 ▸ Raiders

Each campaign turn, there is a chance that raiders or other forms of piracy will hit vessels on their cargo runs or attack vulnerable colonies. Raiders are opportunistic threats that players must deal with as their empires expand. Leaving your systems and convoys unprotected increases the odds of a raider attack.

3.6.7.1 ▸ Raiding Chance

Using a base chance of 10%, roll a percentile die (d100) for every system that contains a convoy or colony (including outposts), modifying the results as follows:

- System contains one or more civilian units (+10% per shipyard, supply depot, or convoy)
- System has military units present (-5% per ship, -1% per flight)
- System is in rebellion (+20%)
- System has an Intel network (-5% per Intel)

These modifiers cannot reduce a system's raiding chance below 1%. There is always a chance of raiders hitting one of these systems, regardless of the size of the fleet that is on station there.

If the modified die result is equal to or less than the raiding chance then a raider fleet has moved into the system. The raiders are treated as having been in the system since the beginning of the @@ Movement Phase and will generate an encounter that must be resolved during the @@ Encounters Phase later this turn.

Example: The Commonwealth colony in Groombridge contains 2 convoys, 1 supply depot, 2 ships, 10 flights, and 1 Intel. The system is good order. This system has a base raiding chance of 10% and the following modifiers apply to its raiding chance:

- *3 Civilian Units (+30%)*
- *2 Ships (-10%)*
- *8 Flights (-8%)*
- *1 Intel (-5%)*

This gives the system a -3% modifier, reducing its raiding chance to 7%. You roll a d100 and get a "6". A new raider fleet has just arrived in the system!

3.6.7.2 ▸ Raider Fleets

The size of a raider fleet is determined by rolling 4d6 to determine the total construction cost of raider units that are attacking the system. The CM spends these economic points to "purchase" raider units off of the Generic Raider Forces Table to take part in the raid. Some source materials may provide their own raider force lists that are geared specifically to the setting and should be used in preference to the generic raider units.

Raider fleets remain an ever present danger and generate encounters against convoys or colonies at their system location until they are finally destroyed.

Generic Raider Forces Table

Unit Name	*Class*	*Cost*	*Maint*	*DV*	*AS*	*AF*	*CV*	*CR*	*CC*	*Specials*
Corsair	CT	2	1/6	2	2	2	0	2	1	

Brigand	CT	3	1/6	2	1	1	0	2	1	Boarding 2
Longship	DD	4	2/6	4	3	2	0	3	1	
Wolf	DD	X	X	3	4	3	0	2	1	Q-Ship
Dragonship	CL	6	2/4	5	4	2	1	4	2	
Battlewagon	CA	8	2/3	6	4	3	2	5	2	
Trireme	CT	2	1/6	2	1	1	2	2	1	
Quinquereme	DD	4	2/6	3	1	2	3	3	1	
Caravel	CL	6	3/4	4	2	2	4	4	2	Carrier
Galleon	CA	8	3/3	5	2	3	5	5	2	Carrier
Asp	LF	1	1/12	1	1	2	-	-	-	
Viper	MF	2	2/12	2	2	2	-	-	-	
Cobra	HF	3	3/12	2	3	3	-	-	-	
Lamprey	MF	2	2/12	4	0	0	-	-	-	Boarding 1
Marauder	HF	4	4/12	4	0	0	-	-	-	Scout 1

Unit Name	*Class*	*Cost*	*Maint*	*DV*	*AS*	*AF*	*CV*	*CR*	*CC*	*Specials*
Strike Carrier	CA	8	3/3	6	3	3	4	4	2	Carrier
Barque	DD	4	2/6	3	3	2	1	3	1	
Sloop	CT	2	1/6	2	1	2	1	2	1	
Skiff	CT	2	2/6	2	1	1	0	2	1	Supply 1
Schooner	CT	2	2/6	2	0	1	1	2	1	Supply 1
Pinnace	CT	2	1/6	2	2	2	0	2	1	
Gunboat	CT	2	1/6	2	3	1	0	2	1	
Galleas	CA	8	2/3	8	2	3	3	4	2	
Felucca	CT	2	1/6	3	1	2	0	2	1	

Brigantine	DD	4	2/6	3	3	3	1	2	1
B5 Dragonship	CA	8	2/3	6	5	3	2	4	2
B5 Double-V	MF	2	1/12	3	1	2	-	-	-
B5 Delta-V	LF	1	1/16	1	1	2	-	-	-

3.6.7.3 ▸ Raider Attacks

Raiders automatically generate an encounter at their system location. In the @@ Encounter Phase, the raider fleet will demand a @@ Pursuit Scenario against a random convoy in the system. If no convoys are present, the raider fleet will demand a @@ Defensive Scenario against a random base. These scenarios cannot be refused. The targets of these scenarios are automatically included in the defender's task force as per @@ Scout Use in Task Force.

Task forces in a raider attack are under special restrictions. Neither task force may include units bigger than a heavy cruiser (CA) because larger capital ships are not effective in an anti-piracy role. Reinforcements are not available in a raider attack due to the haste with which the task forces are assembled and pushed into action.

Civilian units (convoys, supply depots, or shipyards) are captured by the raiders when there are no other units left in the defender's task force to protect them. The raider fleet can take the convoy (which is now crippled) as a prize if they have any need for it, otherwise they strip the civilian craft of cargo and equipment. These units are scrapped (see @@ Scrapping), giving the raiders a number of economic points equal to 50% of their original construction (round up) that they can use to immediately repair damaged units or purchase new units to bolster their forces. A particularly successful raider fleet may eventually capture enough loot to expand their fleet and become a very real threat.

A raider fleet will only demand one scenario per encounter. This limits the amount of damage they can do to your shipping or civilian infrastructure each turn.

3.6.8 ▸ Minelaying

Players may order their Minelayers to deploy minefields to their current system location at this time. A Minelayer may deploy some, all, or none of the minefields it is currently carrying.

Minelayers cannot deploy minefields in the middle of a jump lane. Minefields may only be deployed to a star system location.

- Minelayers carrying minefields may deploy them at this time
- Minelayers may also recover minefields that have already been deployed to the system so that they can be transported to another location

3.6.9 ▸ Minesweeping

Minesweepers user their Minesweeper functions to clear enemy minefields, removing them from the system during the Supply Phase this turn. A player may score 1 point of directed damage against an

enemy minefield per Minesweeper function in their fleet (see @@ Directed Damage). The amount of damage required to destroy a minefield is equal to its Defense Value. Minesweepers may only destroy minefields that have been previously deployed to the system, and they cannot destroy minefields that are still being transported by Minelayers or other transports.

Clearing enemy minefields ensures that your enemy won't be able to use these mines offensively during the Encounter Phase later this turn. It also reduces the effect that the minefields will have on your fleet's movement in the Movement Phase next turn (see @@ Contested Movement).

Please note that Minesweepers are the only type of unit that can destroy enemy minefields outside of a space combat encounter, and a player can only include minefields in his task force if they have other vessels in the system to generate and participate in the encounter. This forces players to rely on their dedicated Minesweepers to clear the minefields that enemies leave behind in their systems.

3.6.10 ▸ Adjust Ordnance Packages

Missile units may adjust their ordnance packages during the Supply Phase. Each Missile unit can be equipped with a total size of ordnance packages equal to its command cost. Flights have a command cost of 1 for this purpose. The list of available ordnance packages can be found on page @@.

3.5 ▸ Encounters Phase

When diplomacy fails, it's up to an empire's military forces to hold the line against the night, no matter the cost. An encounter occurs when two or more non-friendly fleets are in the same system after @@ Fleet Movement or the fleets stumble across each other in deep space between systems. Encounters may lead to space combat scenarios being generated, but they don't have to. A combat scenario will only occur if at least one player in the encounter wants to generate a scenario.

Space combat in VBAM are resolved using the Campaign Space Combat Resolution (CSCR) system included in this chapter or your favorite tactical space combat system, whichever you prefer. The CSCR is designed for quick resolution of space battles. The players act as fleet admirals and have significant control over the outcome of these engagements.

Play proceeds to the Orbital Bombardment Phase once all encounters and space combat scenarios have been resolved.

3.5.1 ▸ Encounters

~~An encounter occurs when two potentially hostile fleets meet in the same system or jump lane during the Movement Phase. The fleets immediately stop moving and the players check to see if they want to generate an encounter at that location this turn. A player cannot generate an encounter against an opponent that his empire has a Non-Aggression treaty with.~~

The player's fleet can choose to demand a scenario against an opposing fleet, retreat from the system, or pass initiative to the player with the next highest die roll.

3.5.1 ▸ Jump Lane Encounters

A jump lane encounter is a chance meeting between two or more fleets in deep space somewhere between two star systems. They occur when these opposing fleets attempt to cross the jump lane on the same turn.

Each player rolls a d10 at the start of the jump lane encounter to determine encounter initiative. The player with the highest roll wins initiative in this encounter and gets to choose an action to perform. The player with the most ships in the encounter wins any ties. Randomly determine who has won initiative if there is still a tie.

The player may demand a @@ Deep Space Scenario against any other player that has forces in the encounter, except for those that his empire has signed a Non-Aggression treaty with. Your opponent must then choose to either accept and resolve the Deep Space scenario or refuse by choosing to withdraw from the encounter and trying to move his fleet back to the last system that it visited before the jump lane encounter was generated. However, the current player may immediately demand a @@ Pursuit Scenario against the withdrawing fleet, and this scenario cannot be refused.

Otherwise, if your fleet doesn't want to fight in this encounter, you can either choose to order your fleet to either remain in the encounter but take no further actions or withdraw back to the last system that it

visited prior to the encounter. If you choose to withdraw your fleet, the enemy may demand a Pursuit scenario against your fleet, and this scenario cannot be refused.

Once the scenario has been resolved, initiative passes to the player with the next highest initiative roll who now has the option of demanding additional scenarios. If no fleet chooses to generate additional scenarios the remaining fleets are given the option to proceed to their original destination or abort their movement orders and return to the last system that they visited prior to the encounter. Fleets arrive at their chosen destination systems in the End of Turn Phase of the current campaign turn. Retreating fleets don't have a choice and they must return to the last system they visited. The encounter is over once all fleets have finished deciding where they are going to move to at the end of the turn.

The encounter ends once each player has finished demanding and resolving scenarios.

~~Fleets that don't choose to stay and engage in combat during a jump lane encounter can either proceed to their original destination or move back to the last system they visited before the encounter was generated. Retreating fleets don't have an option and they must return to the last system they visited. These fleets will arrive at their destinations during the Update Phase this turn. The encounter ends once all the fleets have decided where they are going to move, and you can proceed to the next encounter.~~

3.5.2 ▸ System Encounters

System encounters take place in a star system and are more complex than a jump lane encounter because players have more options for how these encounters are resolved.

As with jump lane encounters, the order in which players demand scenarios in a system encounter is determined by encounter initiative.

~~The current player can demand~~

~~Deep Space scenario (unless blockaded)~~

~~Interception scenario (system owner only)~~

~~Defensive scenario (non-system owner only)~~

~~Breakout scenario (only for blockaded units)~~

~~Withdraw, and enemies can demand Pursuit scenarios against them~~

~~A fleet can demand either a Deep Space or Defensive scenario against an opponent. A Deep Space scenario is a battle in open space, while a Defensive scenario takes place near a planet or other strategic point in the system and allows the defender to add fixed defenses to its Task Force.~~

~~A fleet can refuse a Deep Space scenario by choosing to withdraw from the encounter. The fleet can withdraw to friendly fixed defenses if there are any in the system, otherwise it will attempt to retreat back to an adjacent star system. However, the attacking fleet may immediately demand a scenario against the withdrawing fleet. A Defensive scenario can be demanded if the target withdrew to fixed~~

~~defenses, or a Pursuit scenario can be demanded if it is trying to retreat from the system. Neither of these scenarios can be refused by the withdrawing player.~~

~~An attacking fleet can refuse a Defensive scenario that the defender demands against it by choosing to pull back outside the range of the planetary defenses. The fleet remains in the system but it won't be able to perform orbital bombardment or conduct planetary invasions there this turn. The attacker is also prevented from loading or unloading units or cargo from the system during the Movement Phase of the following turn.~~

~~A defender meanwhile cannot refuse a Defensive scenario, however they can choose to have some or all of its fleet try to retreat from the system while the rest stay behind to protect the system's fixed defenses. After the Defensive scenario is complete, the attacker can demand a Pursuit scenario against the defender's retreating units. This Pursuit scenario cannot be refused.~~

~~If a system is currently blockaded (see 3.6.5 Blockades), then the only type of scenario that the defender can demand is a Breakout scenario. This scenario cannot be refused. The blockaded fleet successfully runs the blockade if all of the ships in the blockading fleet are crippled or destroyed. They may then retreat from the system without fear of enemy pursuit.~~

~~If your fleet moved into a system that is controlled by an opponent that you're not at War with, then you must order them to retreat; you aren't allowed to take any other action because you accidentally crossed the border and must leave their territory at once! However, there's nothing stopping your opponent from demanding scenarios against your own fleet.~~

- Retreating fleets must choose a destination to retreat to; this movement order is performed during the Movement Phase next turn; fleet may make additional moves, but this must be the first move made

3.5.2 ▸ Encounter Resolution

Encounters are resolved

3.5.2 ▸ Space Combat Scenarios

Scenarios are generated only so long as at least one fleet demands a scenario be generated. Once all demanded scenarios are resolved, the encounter is resolved and you can move on to resolve the next encounter.

- Randomly roll to determine who goes first
- Current player can choose to Attack, Retreat, or Pass
- Attack: choose scenario to demand against an opponent
- Retreat: order fleet to leave the system; retreated units can only be targeted by a Pursuit scenario until they disengage from the encounter

There are always two sides in every scenario. The Attacker is the fleet that demanded the scenario, and the Defender is the fleet that is being attacked.

3.5.5 ▸ Interception Scenario

This scenario has a fleet trying to block the approach of an enemy fleet as they approach a fixed defense point in the system. Interception scenarios can only be demanded by the system's owner or one of their allies. A good example of an Interception scenario would be when a system owner has ships stationed at the edge of a system waiting to intercept incoming enemy fleets before they have a chance to push any deeper into the solar system.

The Attacker must split their fleet into two pools. The Defender then chooses which pool they will engage. Units in the other pool maybe not be included as part of the Attacker's reinforcements. Both the Attacker and Defender receive a +2 surprise bonus because their fleets have enough forewarning to prepare for the attack. Neither side ignores below Normal readiness states. Scenario length is unadjusted.

Interception scenarios are usually used when a system owner wins initiative and wants to demand a scenario where his task force is guaranteed a surprise bonus and is guaranteed to not start the battle in a readiness state less than Poor. Of course, their opponent has the same advantage and won't be caught entirely off guard by the interception.

- ~~Both the Attacker and Defender's command limits are halved (round up) to represent that this is a running battle on the edge of the system~~
- ~~+2 surprise to Attacker~~
- ~~-2 scenario length~~
- ~~*This becomes a Defensive/Pursuit hybrid that a system owner can use to give themselves a surprise bonus in the battle. It is low intensity and is not going to be decisive in most cases.*~~

3.5.6 ▸ Breakout Scenario

This scenario has a blockaded fleet attempting to escape a planetary blockade.

Players may only demand a Breakout scenario if their fleets are currently blockaded in a system. The Defender must split their fleet into two different pools and then the Attacker chooses which pool they will engage. Units in the other pool maybe not be included as part of the Defender's reinforcements. The Defender gains a +2 surprise bonus and ignore any below Normal readiness state results. Scenario length has a -2 modifier.

If all of the blockading ships in the pool the Attacker engaged are crippled or destroyed the Defender is considered to have run the blockade and can choose to immediately leave the system. Units that do not choose to leave or fail to run the blockade may return to their fixed defense point at the end of the scenario.

3.5.6 ▸ Deep Space Scenario

A Deep Space scenario is a pitched battle between two fleets that takes place far from any fixed defense points. Neither task force receives a bonus to its surprise roll and there are no adjustments to scenario length.

3.5.X ▸ Defensive Scenario

A Defensive scenario is a coordinated strike against a system's defenses with an enemy fleet moving in to attack a planet or other fixed defense point located in the system.

The Defender may include bases, minefields, and system-based flights in its task force.

Bases treated like ships, may include 1 minefield per ship or base in the task force

The Attacker gains a +2 bonus to their surprise rolls and ignore any below Normal readiness state results. Scenario length roll has a +2 modifier.

Defensive scenarios cannot be demanded by the system's owner or one of its allies, and a player may only demand this scenario against an opponent that has one or more bases in the system. A Defensive scenario cannot be demanded against an enemy if they only have minefields in the system as these defenses are too dispersed to be effectively drawn into a defensive battle.

- Can substitute the system's Productivity value for the flagship's CR if it is higher
- *A coordinated strike against a system's defenses; the only way to attack enemy bases; minefields are not compelled to be included, and not automatically added like bases; this lets players hide their minefields and keep them around as strategic weapons if they don't want to use them tactically in a battle.*

3.5.X ▸ Pursuit Scenario

This scenario has a fleet leaving the system or jump lane encounter being pursued by another fleet.

The Defender must use any crippled ships in their task force to fill non-flagship slots. The Attacker is under special restrictions in that the flagship's CR is halved (round up). This is due to the hastiness with which these task forces are thrown into pursuit. The Defender has a +2 bonus to its surprise rolls and ignores any below Normal readiness states. Scenario length is at a -4 modifier.

Once the Pursuit scenario is over the Defender's forces are disengaged and cannot be forced to participate in any further space combat scenario this campaign turn.

- Only scenario that can be demanded against a retreating fleet
- *A way to do some damage to a fleet that is running away from you*

Space Combat Scenarios

Scenario Type Surprise Scenario Length Special Rules

Breakout

Deep Space none none

Defensive +2 (Attacker) +2 Can only be demanded against system owner, but that player cannot demand this scenario; Defender may include any bases, minefields, and system-based flights in their task force and reinforcements

Interception

Pursuit +2 (Attacker) -4 Defender must use crippled units in task force to fill non-flagship slots

3.5.3 ▸ Task Forces

Space combat occurs between opposing task forces.

- Task force is a group of units fighting together

3.5.X ▸ Flagship

One ship in each task force is designated the task force flagship.

A Defender has the option of using a base as its task force flagship when fighting a Defensive scenario.

If no ships or bases are present to lead the task force, then a flight will assume the role of task force flagship with an effective CR equal to twice its DV. For example, a Graal Beak medium fighter flight (DV 3) would have CR 6 for the purpose of commanding a task force. This would allows the Beak to include itself and up to six other flights in its task force. Any flights beyond the number that can be commanded by the task force flagship are placed into the Reinforcements.

- Flagship must be the ship with the highest CR in the fleet
    - a ship may be excused from the role if it is crippled; i.e., can't be forced to use a crippled ship as the task force flagship
    - in case of a tie, the player chooses which ship is his flagship

3.5.X ▸ Command Limit

- Task force is comprised of a task force flagship and a number of additional ships or bases equal to the flagship's CR

Each task force is comprised of the task force flagship and a number of additional units up to the flagship's CR. For example, a task force with a CR 9 command cruiser as its flagship would consist of the flagship and up to nine other units.

Ships and bases that have CV greater than zero are carriers can include additional flights to the task force. The number of flights that may be added is equal to the total CV in the task force. Minelayers serve a similar function and a number of minefields may be added equal to the total Minelayer value in

the task force. Finally, a number of corvettes may be added equal to the total Tender value in the task force.

All remaining fleet units are placed in the @@ Reinforcements.

- All three special basing stats do not count against the command limit
- In Defensive scenario, the Defender may include up to 1 minefield per ship in the task force; this is optional, and the Defender can choose to omit these defenses in order to keep them around for strategic movement denial purposes

3.5.X ▸ Fixed Defenses

// Base and minefield inclusion? In Defensive scenarios, I am thinking the system's Productivity should be the number of free defenses that a player can add? Maybe extend to flights based from the system, too? That way heavily populated systems have better coordination of their defense grids.

There could also be a Carrier Staging rule that would allow a number of planetary fighters to take part in a non-Defensive scenario at their full stats equal to the Basing of the fleet. So, if twenty flights are based from a planet, and the fleet has a total of Basing (8), then eight flights could have their full stats and the rest have to make do. This would simulate the flights travelling through normal space towards the carriers, docking and having their power/life support topped up. (murtalian)

3.5.X ▸ Reinforcements

Additional units beyond those placed in the task force are moved to the reinforcements. These units are simply set aside in their own pool. At the start of each combat round, a player may move reinforcements into his task force to bring it back up to full strength. Reinforcements may only enter the battle if your task force flagship has enough CR to control the new units in addition to those that are still left in its task force. Additionally, new defenses can be added (rule).

- Any units that aren't included in the task force are placed into the reinforcements.
- Reinforcements cannot be attacked during the combat round (outside of Overkill Damage), and units can move in and out of the reinforcements during the battle

3.5.X ▸ Multiple Combatants

3.5.X ▸ Formations

Task forces use fleet tactics to provide covering fire, point defense protection, and other vital combat defenses to protect themselves against enemy attacks. This natural integrated defense bonus is collectively known as a formation bonus. Formations make it more difficult for an opponent to use directed damage against a target. The Formation Level Table shows the differing directed damage modifiers at different formation levels. Multiply a unit's DV by the directed damage modifier to determine how much directed damage is required to cripple/destroy the unit. Flights treal all units as if they were in a formation level one level lower for purposes of directed damage.

Ships, flights, and convoys start in a level 1 formation, while bases and minefields start in a level 0 formation. The task force flagship receives a +1 formation bonus by merit of the task force's organization. Some ships have the ability to raise or lower formations to either offer a friendly unit better protection against directed damage or to lower an enemy's formation in order to make directed damage against it more effective. Rules for altering formation levels are found in @@ Scout Mission Assignments. A unit's formation level cannot be raised greater than 4.

Formation Level Table

Formation Level	*Directed Damage Modifier*
0	1x
1	1.5x
2	2x
3	3x
4	4x

3.5.4 ▸ Surprise & Readiness

Before the battle begins, each task force rolls on the Surprise Table to determine its readiness state on the first round of combat. The number in parenthesis after the name of each readiness state is the task force's readiness modifier. This value is added to the player's d6 combat rolls when making attacks during the round. This readiness modifier can't decrease a die roll below a minimum value of 1. Depending on your starting readiness state, your task force may begin the scenario positioned to ambush the enemy, or it might be your task force that is being ambushed!

Surprise Table (d10)

Roll	*Readiness State*	
1-	Disastrous (-3)	Task force is completely unready for combat
2	Bad (-2)	Task force has just been ordered to battle stations
3-4	Poor (-1)	Most but not all of the task force is at battle stations
5-7	Normal (+-0)	Task force is at battle stations
8-9	Good (+1)	Task force is fully prepared for the battle
10+	Superb (+2)	Task force knows exactly what to expect in the battle

// We need a huge flashing side bar to explain to people what surprise represents, as they seem to completely (and willfully) misunderstand it all the time.

3.5.5 ▸ Scenario Length

Scenario length is the number of combat rounds that combatants must remain in the battle before the interception window closes and one side or the other breaks off. Roll 2d6 and add the readiness modifiers from both task forces and any scenario specific scenario length modifiers to determine the scenario length for this battle. Space combat has a minimum length of 2 rounds and a maximum length of 12 rounds.

Example: The Jains and Lorans are fighting a Pursuit scenario. The Jains rolled a readiness of Superb (+2) and the Lorans rolled Poor (-1). This is Pursuit scenario, which has a -4 scenario length modifier. The players roll 2d6 and the result is a base scenario length of 7 rounds. Adding the readiness modifiers (+2 and -1) change this to 8 rounds, and the Pursuit scenario modifier (-4) reduces this to a final scenario length is 4 rounds. The players may now finish setting up their task forces to begin the first round of combat.

3.5.6 ▸ Scout Use in Scenario Setup

3.5.X.1 ▸ Encounter Initiative Modifier

A player may use Scouts to spend Intel points from the system to gain a +1 bonus to this roll per Intel point spent. The total Intel that a player spends cannot exceed the number of Scouts in his fleet. Scouts used for this purpose have their Scout values reduced to zero for the rest of the encounter.

3.5.X.2 ▸ Includes/Excludes

Scouts may be used to include or exclude units from either task force in the current battle. To exclude your own units costs 1 Intel point per unit. To include or exclude an opponent's unit costs 2 Intel points. If a unit is included or excluded, any units based from them are automatically included or excluded as well. Includes take precedence over excludes. Excluded units cannot be included in the task force or reinforcements. The unit has effectively disengaged from the scenario.

The total Intel that a player spends on includes/excludes cannot exceed the number of Scouts in his fleet. Scouts used for this purpose have their Scout values reduced to zero for the rest of the encounter.

- Cannot include/exclude task force flagships

3.5.X.3 ▸ Scenario Length Modifier

Each task force may spend a point of Intel from the system for each unused Scout to extend or shorten the scenario by one round per Intel point spent. Scouts used to alter scenario length with Intel points must begin the battle in the Reinforcements. Players should secretly record their scenario length change and then simultaneously announce it when they're done.

3.5.X.4 ▸ Surprise Modifier

3.5.7 ▸ Scoring Damage

The CSCR uses a standard system for scoring damage.

3.5.X.1 ▸ Standard Damage

- Standard damage process of Total Stat x d6+Readiness / 10 = damage **(ROUND UP OR DOWN?**)
- Undamaged units take damage equal to DV and become crippled; crippled units take damage equal to DV and become destroyed
- Crippled ships halve their AS/AF (round up)
- Ship damage is scored by the defender unless the attacker uses directed damage;
- ~~Crippled flights have "dropped out" and have their AS/AF reduced to zero; they are repaired by their carriers and restored to an undamaged state at the end of each combat round~~

3.5.X.2 ▸ Directed Damage

Occasionally you will really want to blow up a particular unit, for example a task force flagship or convoy. To do this, you may apply some or all of your damage as directed damage against targets in the opposing task force.

To use directed damage, first select the unit you want to cripple (or destroy, if it's already crippled). Multiply the unit's DV by the directed damage multiplier for it current formation level to obtain the amount of extra damage needed to cripple or destroy the unit. For example, a ship in a level 1 formation costs 1.5 times its normal DV to cripple or destroy, and a ship in a level 2 formation costs 2 times its DV!

On the other hand, if you lower the formation level of a ship to 0, directed damage against the target is free! This means that you can cripple or destroy a target that is at formation level 0 by paying an amount of damage equal to its DV.

Flights consider all units as if they were in a formation level one level lower for purposes of directed damage. This makes them particularly effective at breaking through enemy fleet formations to make attack runs against specific targets.

After using directed damage, any remaining damage is assigned by your opponent normally, unless otherwise specified.

3.5.X.3 ▸ Leftover Damage

Inevitably, there will be damage left over at the end of a Fire Phase that is not enough to cripple or destroy even the weakest unit in your opponent's task force. Your opponent must use this leftover damage to cripple or destroy weakest target in his task force as long as the amount of damage remaining is greater than half the unit's DV.

This rule encourages players to include smaller escorts in their task forces so they can absorb this leftover damage instead of having to score it against larger (and more expensive) capital ships.

3.5.X.4 ▸ Overkill Damage

If all of the units in a task force have been destroyed, the attacker scores all remaining damage as free directed damage against applicable targets in the opponent's reinforcements.

CM's Note: *This rule exists to prevent abuse of the task force command limits by players that would otherwise intentionally send waves of low CR ships against an opponent to minimize the number of units that actually have to fight in the battle. This rule makes it so that such attempts accomplish nothing more than giving their opponent the opportunity to eliminate their reinforcements without any fear of reprisal.*

3.5.X.5 ▸ Lucky Hits

If a task force has partial damage leftover that is insufficient to cripple or destroy the weakest target in the enemy task force (@@ Leftover Damage), roll 2d6 and on a 12 the attackers managed to score a lucky hit against the target. The blast hit the enemy in a vulnerable spot (perhaps a shot down a thermal exhaust port that led straight to the reactor?) and is successful in crippling or destroying the enemy's weakest unit after all.

CM's Note: This rule exists to cover situations where a task force simply cannot put out enough fire in a single Fire Phase to damage even the weakest target in the enemy task force. The chance of scoring a kill with a lucky hit is remote, but at least it still gives them a chance without resorting to assinging partial damage to individual units which would become tedious in larger battles.

3.5.8 ▸ Combat Sequence of Play

Once the scenario is chosen, the task forces built, reinforcements population, surprise (fleet readiness) and scenario length determined; Scenario resolution proceeds

3.5.X.1 ▸ Command Phase

In the Command Phase, players may assign a new task force flagship. A task force that lost its flagship must be assigned a new flagship. A ship can only be assigned if it has the highest CR of any ship in the task force. If more than one ship is tied for highest CR, the player may choose which ship will become the new task force flagship.

If the current number of ships already exceeds the command rating of the task force flagship (for example, because the previous flagship was destroyed and its replacement has a lower command rating) then ships must be removed to the reinforcements until the number of ships is equal to the current task force flagship's command rating. These can be any ships, including crippled ships and fixed defenses.

(Minefield assignments)

Ramming: Unit rams during appropriate fire phase

The player may now declare if any ships are going to attempt to retreat from combat this round (@@ Retreating from Combat). Only ships currently in the task force may attempt to retreat. It is impossible to retreat from a scenario if there is a non-crippled Interdictor in the enemy task force. Retreating ships

must participate in all fire phases this round and roll for their retreat attempts in the Special Operations Phase.

3.5.X.2 ▸ Special Missions Phase

Once all task force units are in their final assignments, players may order ships on special missions.

Defensive: +1 formation, AF and AS to 1/2.

Anti-Ship: AS bonus equal to 1/2 AF (round up), AF to 0

Anti-Fighter: AF bonus equal to 1/2 AS (round up), AS to 0

Scouting: +1 Scout, AS and AF to 0

Each player may issue "command actions" at the start of each combat round, with the number of command functions available to spend equal to the flagship CR. The cost to assign a unit a mission is equal to its Command Cost. Missions include Defensive (+1 formation level, 1/2 AS/AF), Antiship (add 1/2 AF to AS, AF reduced to 0), Antifighter (add 1/2 AS to AF, AS reduced to 0), and Scouting (+1 scout function). Flights are CC 1 for the purposes of the rule.

- These missions give players more control over the battlefield and can help in situations where a player wants to protect a certain unit or maximize firepower.
- At start of round, player can designate a new flagship; new flagship only has half the normal CR for purposes of command actions
- Crippled units cannot be assigned missions; they have sustained too much damage and can no longer coordinate with the fleet

3.5.X.3 ▸ Electronic Warfare Phase

Scout functions are assigned during the Scout Phase of each combat round.

Your total Scout functions are reduced by the enemy's total Jammer functions; does not affect specialized units such as Guardians, Disruptors, Suppression, or Fire Control.

Guardian: +1 formation

Disruptor: -1 formation

Suppression: -50% AS/AF

Fire Control: +50% AS/AF

The cost to perform a Scout mission is equal to the target's command cost.

3.5.X.4 ▸ Fire Phase One: Ships vs. Ships

3.5.X.5 ▸ Fire Phase Two: Ships vs. Flights

3.5.X.6 ▸ Fire Phase Three: Flights vs. Flights

3.5.X.7 ▸ Fire Phase Four: Flights vs. Ships

3.5.X.8 ▸ Special Operations Phase

Boarding

Retreating

3.5.X.9 ▸ End of Round Phase

Players make modifications to their task forces at this time. A task force flagship may move a total command cost of units equal to its own command rating back to the reinforcements. Towing ships may move an additional command cost of ships back to the reinforcements equal to their number of Towing functions.

After ships have been moved back to the reinforcements, you must now add ships to your task force from the reinforcements until the number of non-flagship ships in the task force is equal to the flagship's command rating or you have no ships left in the reinforcements to add.

If this is a Defensive scenario …

You are now ready for the next combat round! Start the next round at @@ Command Phase. The number of rounds

3.5.X ▸ Capturing Ships & Bases

- Boarding ships can capture units during a battle
    - Boarding points scored as directed damage to attack ships, bases, or convoys during Fire Phase One after other weapons fire is resolved
    - Units that are "destroyed" using Boarding damage are captured instead, and are added to the capturing player's task force.
    - Captured units don't count again the task force's command limit and remain in the task force until they are moved to the reinforcements during task force reorganization.
- If only Civilian units are left in the enemy task force (including reinforcements) then a battle is over and all of the Civilian units automatically surrender.
    - Civilian units are crippled if they weren't already, as the crews sabotage key systems before the enemy gets there.
- Question: Could Assault ships fulfill the role originally held by Marines in the Ship Security Detachment optional rule? So that Assault lets you raise the effective formation level of a

friendly unit for the purposes of Boarding attacks? That seems like it would be pretty straightforward and eliminate an optional rule.

- Units with the Suicide ability cannot be captured; they are destroyed instead if they are captured

3.5.X ▸ Ramming

In some desperate situations players may find that their only hope for victory is by having their crews commit the ultimate sacrifice and ram the enemy. Ramming is not a suitable tactic for winning a war, but it can sometimes be the last option available to desperate forces.

The decision to ram another unit is made in the Command Phase. A ship or flight can normally only be ordered to make a ramming attack if it is crippled, however units with the Kamikaze ability can always ram. These attacks are performed during the appropriate Fire Phase. Ships may ram other ships or bases during Fire Phase One: Ships vs. Ships, while flights may ram other flights during Fire Phase Three: Flights vs. Flights or ships, bases, or minefields during Fire Phase Four: Flights vs. Ships. The ramming unit adds two times its DV to its AS or AF value as appropriate in the selected Fire Phase. Kamikaze units can ram even if they aren't crippled, and they add four times their DV when ramming. The ramming unit is automatically destroyed in the attack.

Bases and minefields are immobile and cannot be ordered to ram enemy targets under any circumstances. Convoys aren't allowed to ram, either, because civilian freighter captains cannot be convinced to make this kind of sacrifice.

Example: A solitary Prometheus light scout cruiser (DV 5) has been ambushed by a Jain task force . The ship was crippled last round and is now eligible to ram. Without any other options, her captain has ordered the helm to give him ramming speed. The Prometheus receives the order to ram during the Command Phase and then makes its attack during Fire Phase One: Ship vs. Ships. The ship gets a +10 AS bonus (twice its DV) during this Fire Phase, but it is automatically destroyed in the attack.

3.5.X ▸ Retreating From Combat

In the heat of battle, a task force commander may be presented with a situation where there is no way that her fleet can survive long enough to safely disengage from enemy. In these cases the only option may be to order ships to spin up their jump engines and perform an emergency jump without going through the required navigational preparations. In doing so, however, there is a very real chance that the jump will fail, which can have catastrophic consequences for the escaping ship.

Roll a d6 in the Special Operations Phase for each ship that is attempting to retreat from the battle and choose which jump lane they are trying to retreat across, then apply the following modifiers:

- The retreating ship has the Jump ability (+1)
- The retreating ship is crippled (-1)
- The ship is retreating across a minor lane (-1)
- The ship is retreating across a restricted lane (-2)

The retreating ship takes damage on a modified die result of "2" or less. Non-crippled ships become crippled, and crippled ships are destroyed. Otherwise, on a "3" or greater, the ship successfully

disengages from the battle and cannot be attacked for the remainder of the encounter. They are leaving the system and must proceed to the target system, performing that movement during the Movement Phase next turn.

Ships cannot attempt to retreat from combat when there is a non-crippled Interdictor in the opposing task force. These special ships have what are often called "gravity well generators" which inhibit the ability of ships to jump in or out of hyperspace. Players that want to retreat from a battle need to target these Interdictors and cripple or destroy them to remove this effect.

- It seems a bit draconian to restrict emergency retreats to only ships with the Jump ability. Instead, Jump could instead give a bonus to the retreat and/or allow the Jump ship to retreat a total CC of units equal to its own CR.
    - Example: An Omega destroyer (CR 6, CC 5) is performing a jump to retreat from combat and it has a Jump drive (and isn't crippled, which would make it lose the advantage of that special ability). It could get a +1 to its retreat roll, and be able to take up to 6 CC of other ships with it when it goes.

3.5.X ▸ After the Battle

Once all combat rounds in a scenario have been resolved, the units in your task force and reinforcements are returned to their original fleets. Flights must now find basing. Any flights that cannot be based in the system are lost.

- Crippled flights are repaired
    - I'm no longer thinking this is necessary, except at the end of the battle. Having flights cripple like ships seems to work just as well, and is more consistent; repairing at the end of the battle makes sense from a bookkeeping perspective.

Crippled convoys have their transport capacity reduced to half that or normal (5 transport capacity) and must destroy any cargo that they are no longer capable of carrying. The convoy's owner chooses what cargo is lost from this damage. Cargo that was being carried on convoys that were destroyed in the battle are removed from play.

Any fleets that survived the scenario may disengage from the encounter and retreat, and they cannot be pursued or have any other scenarios generated against them at this location for the rest of the Encounter Phase. A fleet may still choose to stay and fight or otherwise contest the system, but the choice of to stay or disengage must be made now before before resolving the rest of the encounter.

- Revert to 1E fleet disengagement where fleet remains in system this turn and then must move to an adjacent system of the player's choice as its first move during the Movement Phase next turn.

3.5.X ▸ Space Combat Example

3.X ▸ Orbital Bombardment Phase

~~Once a fleet has achieved orbital superiority in a system by either destroying or driving off the defenders it may commence orbital bombardment against targets in the system. These attacks are used to weaken a colony's defenses before troops can be landed. In extreme cases, orbital bombardment can also be used to wipe out alien populations and leave a system completely uninhabited.~~

3.X.1 ▸ Bombardment Value

A unit's bombardment value quantifies the destructive potential of its guns when they are used to bombard a system. The amount of bombardment points that a unit generates is found on the Fleet Bombardment Value Chart. Gunships add 1 bombardment point per Gunship function.

Crippled ships are too heavily damaged to participate in orbital bombardment, and they don't contribute any bombardment points to the attack this turn. If an out of supply ship performs orbital bombardment it earns an additional out of supply level because it is rapidly exhausting its limited supply of ammunition.

Bombardment Fleet Chart

Class	*Abbr*	*Bombardment Points*
Titan	TN	12
Superdreadnought	SD	10
Dreadnought	DN	8
Battleship	BB	6
Battlecruiser	CB	5
Heavy Cruiser	CA	4
Light Cruiser	CL	3
Destroyer	DD	2
Corvette	CT	1
Superheavy Fighter	SHF	1 per 2 flights
Heavy Fighter	HF	1 per 3 flights
Medium Fighter	MF	1 per 4 flights
Light Fighter	LF	1 per 6 flights

3.X.2 ▸ Bombardment Missions

After totaling the bombardment value, the bombing player decides what sort of bombardment missions they wish to conduct. Each bombardment mission has a different target that influences how many bombardment points are required to score damage against the enemy system.

~~3.X.2.1 ▸ General Bombardment~~

- ~~Early 1E also had general bombardment, where you rolled randomly for every 20 bombardment value to see what you killed. This was a bad cost proposition given that you could kill something for 18 BV in other missions at the time, but the general idea isn't bad. You could lose 1 Census, 1 Productivity, 1 Intel, or 1 Morale depending on how you rolled.~~
- ~~This could be: Roll a d6 for every 12 bombardment points used against the system. 1-3: Utilized Productivity reduced by 1 next turn; 3: Morale reduced by 1; 4: Productivity permanently reduced by 1; 6: Census permanently reduced by 1.~~

~~3.X.2.2 ▸ Tactical Support Bombardment~~

- ~~An old 1E draft has ships spending bombardment value to lower the Defense value of troops to make them easier to kill. Worth exploring? I could see this being better than Attrition damage from the perspective of making it impossible for an attack to bomb off all of the troops for an unimpeded landing.~~

3.X.2.3 ▸ Anti-Troop Bombardment

This is an all-out, concerted strike against an opponent's ground forces. A defending ground unit loses 1 Attrition for every 12 bombardment value (defender's choice). These strikes can disrupt production, and for every 24 bombardment points the system loses 1 Utilized Productivity next turn.

3.X.2.4 ▸ Anti-Productivity Bombardment

Productivity bombardment targets strategic industrial sites in an attempt to disrupt production and permanently cripple the system's industrial capabilities. The system loses 1 Utilized Productivity next turn for every 12 bombardment points. For every 24 bombardment points, permanently remove 1 Productivity.

3.X.2.5 ▸ Anti-Population Bombardment

Population bombardment orders a fleet's orbital guns to rain death down upon major planetary population centers with a goal of maximizing civilian casualties. The system loses 1 Utilized Productivity next turn for every 12 bombardment points. For every 24 bombardment points, permanently remove 1 Census. Roll a d6 for each Census lost. On a "3" or less, Morale decreases by 1. On a roll of "6", the population have tightened their resolve to fight and Morale increases by 1.

~~Suppression Bombardment~~

~~Ships in orbit may use their bombardment value to suppress the use of Productivity on a planet. For a cost of 8 bombardment points per Productivity point suppressed, ships in orbit can lower the effective Productivity figure of a planet for ALL purposes.~~

3.X ▸ Collateral Damage

Particularly heavy bombardment can also cause significant collateral damage to the system. Roll once on the Collateral Damage table for every full 36 bombardment points used against the system this turn.

A system cannot have its Carrying Capacity reduced below a minimum value of 1. If the system's Census, Morale, Productivity, or Intel exceed its new Carrying Capacity then they must be reduced accordingly.

Collateral Damage Table (d6)

Roll	*Effect*
1-2	No Effect
3	-1 Carrying Capacity
4	-1 Census, -1 Morale
5	-1 Productivity
6	-1 Intel

3.X.3 ▸ Sustained Bombardment

Bombardment points that aren't spent on bombardment missions this turn automatically carry over to the Orbital Bombardment Phase next turn as long as the attacker maintains orbital superiority on the following turn. If the attacking fleet is driven off or destroyed before it can bombard on subsequent turns any bombardment points that it was carrying forward is lost and will have no effect on the system. It can be assumed that the bombarding fleet was forced to abandon its bombardment efforts before they could come to fruition and any damage they did to the system was trivial at best and won't have any lasting effects.

3.X ▸ Ground Combat Phase

This is the phase where control of a system is ultimately decided. Orbital bombardment and planetary blockades can only go so far and in the end it's up to the ground forces to settle the issue and determine who will end up in control of a contested system.

3.X.1 ▸ Ground Combat Procedure

All ground combat occurs simultaneously. You assign each of your units in a contested system to attack one opposing ground unit. Up to four of your units may attack the same opposing ground unit.

Ground attacks are resolved by rolling the attacking unit's D Factor and adding its Attack value, then the defender rolls his own D Factor and adds it to its Defense value. The defending unit takes 1 Attrition damage per point that the attacker's total exceeds the defender's own. If more than one ground force is attacking the same target, the attacker gains +1 Attack per additional attacker. Because of the nature of this opposed roll, it's typically most efficient to use multiple units to attack a single opposing unit rather

than have them attack individually. Ground forces in reserve status defend like normal, except they have -1 Defense and cannot be ordered to attack.

Any ground unit that has its Attrition reduced to zero is destroyed and removed from the game. Units that have taken Attrition damage but not enough to eliminate them retain this damage until it is repaired. These weakened units are easier to kill than their full strength equivalents and, over the course of a long ground war, their opponents can hope to slowly grind them down until they are finally overrun and destroyed. Since combat is simultaneous, eliminated units still get to perform their planned attacks.

Ground combat ends once all ordered attacks are complete. As a result, it can take several turns for attacking troops to wear down the defenders enough to completely eliminate them so that they can capture the system. This gives the defender time to move in reinforcements to intercede on the colony's behalf.

Example: A Jain Royal Marine (Attrition 3, Defense 3, Attack 2, D Factor d3) is being attacked by two Brindaki Regulars (Attrition 2, Defense 2, Attack 2, D Factor d2). The Royal Marine is counter-attacking one of the Regulars.

The attacking Brindaki Regular rolls a 2 for its D Factor, which is added to it Attack value for a total of 4. It gains +1 Attack from the second Regular that is attacking the same unit (no attack roll is made for this second unit), bringing the total to 5 Attack. The Royal Marine rolls a 2 on its own D Factor. Adding this to its Defense gives it a total of 5. The Brindaki attack total doesn't exceed the Jain's defense total and as a result no damage is scored in this attack.

The Royal Marine now rolls for its own attack. Its D Factor roll is a 2, which is then added to its 2 Attack value for a total attack of 4. The Brindaki Regular rolls a 1 on its D Factor, which is added to its Defense to give it a modified Defense of 3. The Jain's total exceeds the Brindaki's own by 1 point, which means that the Brindaki Regular takes 1 Attrition damage.

3.X.2 ▸ Invasions

Invading ground forces attack at a -2 Attack penalty if invading from convoys or a -1 Attack penalty if invading from Assault ships. Marines

All defending units not in reserve status in an invasion gain a +1 Defense bonus for being "dug in".

If there
are no units defending the system, the owning
player may choose to deploy 1 Census (Militia)
unit to repel the invasion. This unit is free and
costs no maintenance, but is eliminated if a
beachhead is established or removed when there
are no more invading units. This elimination or

removal of this unit does not affect the Census
statistic of the system.

Marines can invade from any type of transports they are embarked upon.

Other ground units may invade only if Assault ships are used in support of each such ground unit. The number of Assault functions required to support a ground unit invading is equal to the troop's construction cost. Assault ships used to support an invading ground unit may not be used to carry any other ground unit; their troop capacity and assault shuttles are being used to hold the invading troops.

If Assault ships support a Marine unit in an invasion, the unit invades at its full Attack value. This is the standard Marine assault bonus.

Assault ships may only support one ground unit in any given invasion. Assault ships that support an invading ground unit may also be ordered to provide @@ Tactical Support.

The invading units must seize a beachhead before any other friendly ground forces may land on the planet. A beachhead is established when the invading unit successfully damages a defending ground unit and survives the counter attack.

If more than one unit is invading on the same defender, each
unit must contribute more attrition damage than
the unit's defense to seize a beachhead.

If an invading unit secures a beachhead, it can continue to fight next turn as a normal ground unit, it is no longer considered to be invading. Otherwise, the unit is considered to have not successfully invaded from its transports and must attempt another invasion next turn.

So long as one invading units secures a beachhead, friendly ground forces will be able to land in the system during @@ Landings & Deployments. This does not allow another invading unit that was unsuccessful in securing a beachhead to disembark this turn, however. Units cannot be ordered to both invade and disembark on the same turn.

If all friendly ground forces that were landed in the system are destroyed, the player will then have to invade again to secure a new beachhead for future landings.

Units not in reserve status attacked by an invading unit automatically counter-attack the invading unit. This is a bonus attack, in addition to any additional attacks the ground force already made against a unit already landed in the system.

For its attack on the invading unit, the defending unit is given a +1 "dug in" bonus to its Attack value.

A defending ground unit attacked by more than one invading units is entitled to a counter-attack on each invading unit.

Capturing an enemy system requires that you load friendly ground forces onto Transport Fleets and move them to an enemy controlled system to attempt an invasion. Ground forces only receive half their normal Attack value (round down) when they invade from transports unless they are being supported by friendly Assault ships. The number of assault functions that are required to support a ground force during an invasion is equal to its Construction Cost. Marines always receive their full Attack value when they invade from transports, but they gain a +1 Attack bonus if they are supported by Assault ships.

All of the defending ground forces that are on the ground in the contested system gain a +1 Defense bonus because they are dug in and prepared for the enemy attack. Defenders can attack any of the enemy ground units that are participating in the invasion, but they can't attack troops that are on orbiting transports that aren't invading this turn.

An invader must seize a beachhead before any of their ground units may land on the planet. A beachhead is established if at least one defending ground force was killed in the invasion. This secures a landing zone for your ground forces and allows you and your allies to disembark them to the planet's surface next turn. Ground units don't receive an Attack penalty once they have been landed in the system.

There's little reason for you to attempt another invasion if your empire already has a beachhead in the system. You're better off landing troops in the system and then fighting a conventional ground war on subsequent turns. The exception to this is if you have troops waiting in orbit that need to help support the troops on the ground who are at risk of being eliminated by enemy ground forces this turn. In this case invading from transports might be your best option for maintaining your existing foothold in the system.

Example: A Human Marines (Attrition 2, Defense 3, Attack 3, D Factor d2) and Infantry (Attrition 3, Defense 2, Attack 2, D Factor d3) and invading a Kili system from orbiting Transport Fleet. The Kili have 3 Defense Brigades (Attrition 4, Defense 3, Attack 1, D Factor 2).

The Marines have the Marines special ability, and they invade with their full Attack value. The Infantry meanwhile only receive half their Attack value, reducing them to Attack 1. The Kili meanwhile are dug-in, and gain a +1 Defense bonus (increasing them to Defense 4).

The Human player decides to have both of his ground forces attack the same Kili Defense Brigade. Likewise, the Kili player has ordered all of his Defense Brigades to attack the Marines.

The players choose to resolve the Human attack first. The Marines are leading the charge because they have the highest Attack value. They receive +1 Attack from the supporting Infantry. The Marines roll a 2 for their D Factor, for a total of 6 Attack value. The target Defense Brigade rolls a 1 for its own D Factor, giving it 4 Defense value. The Human's Attack exceeds the Kili's Defense by 2, and the Kili takes 2 Attrition damage (now at 2 Attrition).

The Kili Defense Brigade has a base Attack value of 1. It is getting +2 Attack from the pair of supporting Defense Brigades. It rolls a 2 on its D Factor, for a total of 5 Attack value. The Marines also roll 2 for their D Factor, giving them a 5 Defense value. The Kili fail to score any damage to the Marines.

The Human player was unable to seize a beachhead in the system this turn because they were unable to destroy any of the Kili ground forces during the Ground Combat Phase this turn. This prevents the Humans from landing troops in the system next turn.

3.X.3 ▸ Landings & Deployments

Other cargo (including units that may be carried as cargo) are embarked, disembarked or deployed in this step. Cargo cannot be embarked and disembarked or deployed on the same turn. Ships in reserve may not embark, disembark, or deploy units.

Once all ground attacks have been resolved, ground units may disembark from transports and land in the system as long as the system is owned by their empire or a Military partner or a friendly beachhead has been established in the contested system.

Ground units already on the ground in the system may also embark from onto transports owned by the player or an allied power at this time. Ground units that invaded as per @@ Invasions this campaign turn may not embark aboard transports at this time.

3.X.4 ▸ Economic Disruption

The mere fact that ground forces are fighting on the ground in a system can cause a disruption in productivity. The system owner compares the total Attrition value of his forces to the total Attrition value of all enemy ground units that have been landed in the system to determine how much Productivity he still controls. The system's Utilized Productivity next turn is halved if the enemy's total Attrition is greater than or equal to twice the defender's total Attrition. Utilized Productivity is further reduced to zero if the enemy's total is greater than or equal to four times the defender's own. These effects are cumulative with Morale, so a system that is in unrest and has enough enemy troops present to further halve its production would be reduced to one-quarter its normal Utilized Productivity. Round fractional Utilized Productivity values up.

3.X.5 ▸ Conquest of a System

A system is conquered once all of the defending ground forces have been eliminated and there is at least one enemy ground force left that can take control of the system. The invaders have successfully conquered the system and immediately take ownership of the colony. If two or more empires were both trying to conquer the system on the same turn, either as allies or as adversaries, the power with the largest disembarked army (by total Attrition) assumes ownership upon its conquest.

~~Shipyards are captured when the system they are located in are conquered by an enemy force. Newly-captured shipyards start out in a crippled state and must be repaired before the new owner can start using them. Any Mothballed units that were being stored at these shipyards are also captured.~~

~~These units remain in mothballs and it is up to their new owner to decide whether or not to reactivate them, scrap them, or leave them be.~~

3.X.6 ▸ Integrated Example: Ground Combat

3.7 ▸ Construction Phase

All new unit purchases or repairs ordered and paid for during the 3.1 Economic Phase are completed in the Construction Phase. All new units are then deployed to the map at the location they were built or purchased.

3.X.1 ▸ Construction Capacity

Construction capacity represents the raw industrial capability to finance and implement large-scale military construction projects. The total construction cost of applicable units that can be built at a location is equal to its construction capacity. Systems often have multiple sources of construction capacity. Massive orbital shipyards are the primary source of construction capacity that is used to build naval units (@@ Construction at Shipyards), however a system itself also has a limited construction capacity (@@ Construction at Systems). Multiple construction capacity sources at the same location can combine their construction capacities to allow for the construction of larger, more expensive units.

If a system does not have enough construction capacity to perform all the work that was scheduled for completion and paid for this turn, the items in excess of its construction capacity are not performed. The system's owner selects the construction projects that are delayed by the lack of capacity. These projects will instead be completed during the next @@ Construction Phase, if possible. Units can be left partially completed with final construction occurring on a future turn (@@ Partial Construction).

3.X.3 ▸ Construction at Shipyards

The majority of ship construction occurs at shipyards in orbit of inhabited worlds. Each shipyard has 10 construction capacity. This is the total construction cost of ships, flights, and convoys that can be built at the shipyard each turn. Crippled shipyards cannot be used to build, repair, or refit units until they are repaired.

3.X.2 ▸ Construction at Systems

Atmospheric ships, flights, convoys, and minefields can be built using planetary industry and are then launched into orbit upon completion. A system effectively serves as a construction capacity equal to twice its Utilized Productivity for the purposes of building these units.

Colonies can also be used to build non-Atmospheric ships and flights, but these units require extensive prefabrication and must be launched into orbit in pieces for final assembly. These extra costs DOUBLE the construction costs of all non-Atmospheric vessels built using planetary construction capacity.

3.X.4 ▸ Base Construction

Bases are built in a different manner than other units. Convoys are required to support the construction of bases as these units are used to ferry in supplies and workers to build the massive orbital structures. Each convoy that is not currently carrying other cargo or assigned to a trade route provides 10 construction capacity that can be used for base construction. Multiple convoys can pool their construction capacities to affect larger base construction projects.

3.X.5 ▸ Purchasing Ground Forces

The total construction cost of ground forces that can be purchased in a system each turn is equal to its Census value. For example, a system with 4 Census may only deploy up to 4 construction cost of troops per turn. The net effect is that larger colonies will be able to marshal larger armies in a shorter amount of time while sparsely populated frontier planets will have a much harder time rounding up conscripts to fight.

3.X.6 ▸ Partial Construction

Units can be left partially completed at a system or shipyard on the current turn and completed as the same location on a following turn. Full payment of the unit's construction cost is not required for construction to begin, and in some instances it may be more prudent to spend some economic points this turn to start construction rather than waiting for the pull purchase price to become available.

The disadvantage to partial construction is the threat that the partially built unit will be destroyed before it can be completed, resulting in the loss of the economic points already spent on the now destroyed assets.

3.1.X ▸ Repairs

Ships, bases, and convoys that have been crippled can be repaired to restore them to an undamaged state. The cost to repair a crippled unit is equal to 25% of its construction cost (round up). Ships must return to a system that contains a friendly shipyard in order to be repaired, however these repair operations don't count against the shipyard's construction capacity. Crippled shipyards cannot be used to repair units until they themselves are repaired. Atmospheric ships, including civilian convoys, can be repaired in any friendly system as long as that system's Utilized Productivity is greater than or equal to the repair cost. Bases can be repaired if they are located in a system that contains a friendly colony. Otherwise, an empire must use field repairs to fix them.

Units cannot perform any actions during the Movement Phase on the same turn they are being repaired and they are treated as non-combatants if attacked during the Combat Phase.

Example: The Human player has a crippled Prometheus light scout cruiser that is in need of repairs. This ship has a construction cost of 7, which gives it a repair cost of 2 economic points.

3.1.X ▸ Field Repairs

Units that can't be repaired by traditional means may instead receive field repairs from a friendly supply depot or military supply ship. The cost to repair a crippled unit using field repairs is equal to 50% of its construction cost (round up).

A supply depot may coordinate up to 10 economic points of field repair operations per turn, while the maximum cost of field repairs that a military supply ship can support each turn is equal to its Supply rating. Multiple units can combine Supply functions to affect larger repairs. Supply depots and military supply ships cannot perform field repairs if they are crippled, out of supply, or performed any movement orders this turn. Additionally, Supply ships that were used to trace @@ Extended Supply Routes in the Supply Phase cannot conduct field repairs this turn.

The unit being repaired is treated as a non-combatant if attacked during the Combat Phase, but the Supply ships are free to engage in combat.

Example: A Prometheus light scout cruiser (Cost 7) is being accompanied by 2 Hermes transports (Supply 2). The Prometheus was recently ambushed by Waschaki pirates and was crippled. It will cost 4 economic points for the Hermes to field repair the Prometheus cruiser.

3.1.X ▸ Refits

Units can undergo refits to convert them into members of a different class. The cost to perform a refit is equal to 50% of the construction cost of the class that the unit is being refitted into (round up). A unit may only be refitted into a class of the same size. For example, a corvette that is refit could become a different class of corvette but it could never become a destroyer.

The same limitations that apply to repairs apply to refits. Ships and flights must be in a system with a friendly shipyard to be refit. The refit cost doesn't count against the shipyard's construction capacity. Bases can only be refit if they are in a system that contains a friendly colony.

Example: An Ares heavy cruiser in the Sol system is moved into the local shipyard with orders to be refit into a Hades assault cruiser (Cost 7). Both the Areas and Hades are heavy cruisers, which makes this a valid refit.

hmm . . . or full cost of new design less scrap value of the old design?

3.1.X ▸ Attrition Damage Repair

Ground forces that have suffered Attrition damage repair 1 point of Attrition damage during the Construction Phase as long as they are in supply and disembarked to a friendly colony. This represents that ground forces that have previously lost unit cohesion are integrating fresh reinforcements and will eventually return to full strength. The maintenance costs for these troops cover the availability of additional manpower and material needed to slowly repair them at no additional cost.

Ground forces that are out of supply, embarked aboard ships or convoys, or disembarked to an enemy system do not automatically repair Attrition damage on their own. These units rely on Hospital ships to aid them in repairing lost Attrition. Hospital ships can repair 1 Attrition per Hospital function each turn.

Players that are expecting to fight an extended ground campaign should plan on bringing several Hospital ships along with their fleet to keep their troops replenished as part of the offensive.

3.1.X ▸ Scrapping

Units can be scrapped to remove them from service and recoup some of their original costs. Scrapping a unit in a friendly system recovers 50% of the original construction cost (round down). Any cargo or other units that the vessel is carrying are automatically scrapped along with it. A unit's current maintenance state has no impact on its ability to scrapped. This allows players to scrap reserve and mothballed units without activating them first.

No economic points are recovered from scuttling units in uninhabited or enemy controlled systems because these units are being scuttled rather than scrapped. Players usually only scuttle units if they need to reduce their overall maintenance costs or to prevent the units from being captured by an opponent. In the latter case, destroying the units is seen as preferable to letting them fall into enemy hands.

3.X.X ▸ Activations & Deactivations

Players may activate or deactivate units to change their maintenance status. Usually this means putting active units into reserve or mothball status, or moving a unit from reserve or mothball status back to active status. These maintenance status changes all happen during the Construction Phase.

3.X.X.1 ▸ Active Status

Active status is the default maintenance state for all units in the game. Units in active status operate without any penalties or special conditions.

3.X.X.2 ▸ Reserve Status

Units that are placed into reserve status remain equipped for duty but have been partially decommissioned to reduce costs at the expense of combat readiness. Reserve units pay only half the normal maintenance costs (round up), however they are considered to be crippled for movement and combat purposes. For example, this means that a reserve ship can only move through at most one jump lane per turn (or two if one of them is a major lane), its Anti-Ship and Anti-Fighter values are reduced to half that of normal (round up), and it is destroyed when it takes damage. These significant penalties demonstrate that reserve units are not truly ready for combat.

Only ships, flights, and ground forces may be deactivated and placed in reserve status. Bases and minefields cannot be placed in reserve status.

3.X.X.3 ▸ Mothballed Status

Mothballed units have returned to base and are laid up in ordinary at friendly bases. Their weapons and various other important systems have been stripped out and are now being stored on-site in anticipation of the day when they may need to be reactivated. Mothballed units cost nothing to maintain. They can't participate in any battles that are fought at their location, nor can they be loaded on to transports and moved as cargo. The only actions that a mothballed unit can perform is to be reactivated or scrapped.

Ships, flights, and minefields may all be mothballed. However, bases and ground forces cannot be mothballed. Unwanted units of these types should be scrapped (see @@ Scrapping) if your empire is no longer capable of maintaining them or simply doesn't need them anymore.

3.X.X.4 ▸ Maintenance Status Changes

Changing a unit's maintenance status requires that a unit be brought in so that work crews can strip down its systems and put them into storage (deactivating) or bring the gear back out and reinstall it (activating). For this reason, local construction capacity is required to perform these maintenance status changes.

A ship must be at a shipyard in order to be activated/deactivated, with the exception that atmospheric vessels which can be activated or deactivated in any friendly system, not just those that contain shipyards, because they can land on a planet's surface and use planetary industry. Flights and minefields can be activated/deactivated at any inhabited system. It does not "cost" anything to activate/deactive a unit, but the unit's construction cost counts against the construction capacity of the shipyard or system on the turn it the maintenance status change is made. Any flights or minefields that a ship is carrying are mothballed with it, and the construction costs of these units also count against the location's construction capacity on the turn they are activated/deactivated.

A side effect of the shipyard requirement for ship activations/deactivations is that you must make sure to maintain a shipyard in any system where your empire is storing deactivated ships or else you will no longer be able to reactivate them. You must also consider the possibility that an enemy force might move into the system and destroy the shipyards before retreating, making it impossible for you to reactivate any of the ships that were being stored there until a new shipyard can be built.

Units placed in a special maintenance status such as reserve or mothballing during the current Construction Phase assume their new maintenance status immediately and their maintenance costs adjusted accordingly to prepare for the @@ Economic Phase next turn.

3.X.X ▸ Jump Lane Improvements

- Explorer ships can improve jump lanes
- Restricted to Minor (30 EP?)
- Minor to Major (60 EP?)

3.X.X ▸ Deploy New Construction

Completed units are placed in the system where they were built this turn.

// reorganize fleets to prepare for the next turn

Flights and minefields completed this turn can be deployed to carriers and minelayers, respectively, that are located in the same system as where they were built. Flights and minefields can also be automatically moved to any friendly fleets or systems during the @@ Strategic Redeployment step of the Supply Phase next turn as long as the target fleet or system is in supply.

3.X ▸ Colony Phase

3.X.1 ▸ Colonizing a System

New colonies are established by moving a convoy into an uninhabited system and ordering it to create a new colony. The convoy is landed in the system where it is disassembled and converted into living and work space for the new colonists. If a convoy was carrying a Census point when it colonized the system, then the colony starts with 1 Census and 1 Morale. Otherwise, if the convoy wasn't carrying any Census, the system is an outpost rather than a full-fledged colony. An outpost doesn't have any Census or Morale and can't produce anything, but it does establish a permanent presence in the system. An outpost becomes a full-fledged colony once its population grows (@@ Population Increases) or a Census is moved via convoy into the system and disembarked. The arrival of this first point of Census increases the system's Morale by 1 and the outpost matures into a colony.

Players may not make any purchases at colonies that were established this turn. This moratorium on new construction extends to outposts that matured into full colonies this turn. You must wait until the Economic Phase next turn to begin investing in these new colonies.

Colonizing a system gives your empire control of the system, and you may immediately begin garrisoning troops and flights in the system to protect it against enemy invasion or attack.

3.X.2 ▸ Productivity Increases

Players may spend economic points to improve Productivity in their systems. The cost to increase a system's Productivity by 1 point is equal to 10 times its new Productivity value. It would cost 20 economic points to increase a system from 1 to 2 Productivity, for example. A Productivity point can only be utilized if there is a Census available to operate it, and a system's Productivity cannot be increased beyond its current Census value.

Players may also sell off Productivity at their colonies to recover half of the original cost. The system's Productivity is then reduced by 1. Productivity is usually only sold off during times of crisis, such as if an empire is in dire financial straits or the system is close to falling into enemy hands and the player wants to sabotage the system's Productivity before it is captured.

A system may only purchase or scrap one point of Productivity per turn, and then only if the system is in good order and not currently blockaded by an enemy fleet. Productivity increases purchased this turn won't affect the system's economic or construction output until the Economic Phase next turn.

3.X.3 ▸ Terraforming

Terraforming is the process of deliberately changing a planet's environment by modifying its atmosphere, temperature, and ecology to make it more suitable for inhabitation. The cost to terraform a system is equal to 10 times its current Carrying Capacity. An empire must have a colony or outpost in a system before it can be terraformed, and the system can't have more than one special trait (ignoring system anomalies). Systems that already have two

or more special traits already have Earth-like climates and cannot be improved any further.

Once terraformed, roll on the Special Traits Table (pg X) and apply the indicated special trait to the system. The system receives both the resource (Capacity, RAW) and population (Census, Morale, Productivity) bonuses from the special trait. Re-roll any *System Anomaly* or *Homeworld* results as these do not apply to systems that are being terraformed.

Example: The Kili colony on New Alcatta (6 Capacity, 1 RAW, Robust Economy) is in desperate need of terraforming to improve its value. The Kili player spends 60 economic points to fund the terraforming of the system. The player rolls on the Special Traits Table and gets Ultra Rich (+2 RAW, +1 Productivity). Eureka! New Alcatta now has 6 Capacity, 3 RAW, and both the Robust Economic and Ultra Rich traits. The system also gains 1 Productivity from the terraforming efforts, representing the arrival of new mining companies that have arrived to exploit the local resources that are now accessible in the system as a result of the terraforming. New Alcatta cannot be terraformed any further because it already has two special traits.

3.X.4 ▸ Population Increases

The Census values of inhabited systems naturally increase over time. Every 12 turns (e.g., at the end of each campaign year), each system rolls a d10 and adds its Carrying Capacity to the roll. This modifier represents that systems with high Capacity values have planets with more habitable biospheres. The system gains 1 Census if the number rolled is greater than 15. A system's Census value cannot exceed its Carrying Capacity. If a system doesn't gain Census this year, which is possible for a hostile environment colony, then add +1 to the system's next population increase roll. This effect is cumulative. If a system gains a Census but its current Census is already equal to its Carrying Capacity, the extra Census is applied to the player's nearest system that still has available Carrying Capacity.

Example: Alpha Centauri has 8 Carrying Capacity and hasn't had a population increase in either of the last two checks. The player rolls a d10 for the system and adds +10 to the roll (+8 Carrying Capacity, +2 missed checks). The die roll is a 9, which becomes Centauri a 19 after modifiers. This is greater than 15, and the system's Census increases by 1.

3.X.5 ▸ Morale & System Loyalty

// I'm still not happy with how static Morale is. I still think we need a better way to randomize this, whether through standardized random events or possibly some sort of integrated mission system similar to WAP? I'm open to suggestions

Morale Conditions

Morale Condition	*Target*	*Modifier*
Blockade: System is being blockaded by an enemy force	2	-1 Morale
Rebellious: An adjacent friendly system is in rebellion	1	-1 Morale

Supply Shortage: System is out of supply	1	-1 Morale
Conquered: System was conquered by an enemy this turn	3	-3 Morale
Troop Garrison: Number of ground forces is greater than half Census	1	+1 Morale
Unemployment: Productivity is less than half Census (and Census is > 3)	1	-1 Morale
Full Employment: Productivity is greater than or equal to Census	1	+1 Morale
Homeworld Falls: Owner's homeworld was conquered this turn	3	-1 Morale
Shattered: Owner lost a battle in the system this turn	2	-1 Morale
Victorious: Owner won a battle in the system this turn	2	+1 Morale
Martial Law: Owner is using troops to control the population (@@ Martial Law)	1	-1 Morale

CM's Note: A CM might require a player's systems to make a special morale condition roll if their government took an unpopular action. CMs can also tie morale conditions into their campaign storylines. They could also apply modifiers to better represent the current situation. For example, systems that are feeling undefended might get a -1 penalty to their rolls.

3.X.6 ▸ Unrest

A system is in unrest when its Morale is less than half its Census, and its Utilized Productivity is immediately halved (round up). This represents dissension at the colony leads to rioting, work stoppages, and other signs of political upheaval.

3.X.7 ▸ Rebellion

If a system's Morale reaches zero, then the colony stops producing and is considered to be in rebellion. Roll a d6 for each Census in the system. On a "2" or less, that Census actually rises up to fight the loyalist forces. Place a Planetary Militia in the system to represent each of these rebel Census. If the system is unoccupied, then it becomes a neutral system. Otherwise the rebel Militias will remain in the system and continue fighting for their independence. If a rebel Militia destroys a loyalist ground unit, every Census makes another d6 roll at a -1 modifier to see if they join the rebellion. On a modified "2" or less, place another rebel Planetary Militia in the system.

If the system owner eliminates all rebel Militias the system's Morale will increase by 1, signifying the population's resolve to stop fighting. An eliminated rebel Militia rolls a d6 plus any excess Attrition damage above what was needed to destroyed it. On a result of "6" or more the Census of the system is reduced by 1. Subjugating an open rebellion often lead to collateral damage among the civilian population that was supporting the rebels.

Systems that are in rebellion receive a +20% raiding chance modifier to @@ Raiding. These “raiders” are not necessarily pirates but rather ships and flights that have joined the rebel cause and want to see the system gain its independence.

3.X.8 ▸ Martial Law

Ground forces can be used to control a population that is in unrest or rebellion by declaring martial law. This improves the economic output of the beleaguered system by one level: from rebellion to unrest, or from unrest to good order. There is no benefit for declaring martial law in a good order system as its population is already completely content and productive.

Martial law can only be maintained as long you have enough ground forces disembarked in the system to enforce it. The minimum number of ground forces that you need to maintain martial law is equal to the system’s Census value. Troops with the Peacekeeper special ability count as two ground forces for the purposes of this rule.

3.X.9 ▸ Reprisals

Players may conduct reprisal attacks against their own civilian populations in an attempt to eliminate dissident factions and restore order. These attacks can increase a system’s Morale but the resulting mass killings run the risk of reducing its Census in the process. The outcome of a reprisal is determined by a d10 roll. The system gains 1 Morale if the roll is greater than or equal to the system’s current Morale value; however, it also loses 1 Census if the roll is less than or equal to its current Census value. Reprisals cannot be used against a system that is already in rebellion.

3.X ▸ End of Turn Phase

~~The turn ends in this phase. Optional rules like the Random Events option occur in this phase.~~

- Determine Victory

Chapter 4 ▸ Optional Rules

"Unmapped Stars" Variant

- All jump lanes are restricted lanes after they are explored and must be upgraded to improve them
- Represents systems where empires must build/activate jump gate or mass relay infrastructure to accommodate travel between systems

"Jump Engines + Restricted Lane Escort"

- Reading Charlie's old New Earth Alliance campaigns reminded me that I kind of liked the way that restricted lanes were handled in some of those old campaigns, where you could only cross a restricted lane if you fulfilled some sort of prerequisite. With B5 that meant having a jump engine in the fleet, but with standard VBAM I'm not sure how you would simulate that. Or if it just has to be a special rule where you say a ship has to spend +1 Cost to have a Jump engine, and then only they can cross restricted lanes on their own. It would be a simple enough optional rule.
- Ships without jump engines cannot retreat from battle unless they are retreating with a jump capable unit (CC of ships equal to retreating unit's CR can retreat with it?)

Planetary Surveys

- You don't roll for a system's special trait until after you system is surveyed. The number of Explorer functions that must be spent to complete the survey is equal to its base Carrying Capacity.
- The rule is good for slowing down exploration
- is more relevant to detailed star systems where you'd need to survey each planet
- Variant Rule - Require establishment of an outpost and turns equal to base Carrying Capacity before rolling. (Wade)

Wartime Economies

- I absolutely don't advocate a return to the 1E economic treadmill, because that causes severe balance issues and encourages players to stay at war constantly. However, I think there is stil room for it to affect construction capacity at planets during wartime.
- I'm not sure how many players still play with this rule or not?

"Advanced Setup"

- Starting colonies
- Point based system

    - Unimportant (1), Minor (2), Major (4)
    - Scales better than in 2E because stats are now generally more controlled
    - 10 points to spend on colonies for players that want a fast start
        - Default is then 1 Major, 2 Minor, 2 Unimportant
- Provide a fixed option for players that want a balanced start
- Should this default scenario give players extra colonies, or should this be an optional rules?
- Once homeworld selection is complete, players then take turns placing their initial colonies on the map. The number of colonies that each player starts with is determined by your scenario. It's recommended that each empire start with 1 Major system, 2 Minor systems, and 3 Unimportant systems in addition to its homeworld. This gives each player a suitable economic base from which to grow and expand during the early part of the game.
  Random map generation rarely gives players the opportunity to acquire such a perfect alignment of systems when they're placing their initial colonies. As a result, each player receives a number of colony points that can be spent to claim systems during map setup. The default colony point total is 6 times the number of players, however players can adjust this up or down depending on how much real estate they want their empires to control at the start of the game. A system's colony point cost is based on its colony size as follows: Outpost (1), Settlement (2), Minor Colony (4), Colony (6), Major Colony (8), Homeworld (10).
  Colony placement is resolved in the reverse order of homeworld placement. The last player to place a homeworld on the map gets first choice on which other systems his empire controls. That player places all of his available colonies before the next player gets to place any of his on the map.
  Players can only place colonies in systems that are connected to one of their other systems by a jump lane. This ensures that all of the empire's starting worlds will be contiguous to one another. More to the point, it prevents a player from spreading his starting colonies all over the map with the goal of scooping up all of the best systems before his opponents get a chance to place their own colonies.
  Continue placing colonies on the map until the last player (i.e., the one that got first pick during

homeworld placement) has finished placing his empire's starting colonies.
Any systems that aren't controlled by any empires after all starting colonies have been placed on the map will start the game in an uninhabited state. Reduce their Census, Morale, and Productivity values to zero. These are the neutral systems that the empires are going to be fighting over during the game. It's up to the players to move Colony Fleets in to colonize these systems during the campaign.

Extended Construction Times

In the campaign, all construction times are somewhat quicker for the sake of better game play. For those desiring a more realistic approach, use half the unit's construction cost (round up) as the number of turns it takes to complete construction. For instance, a Terran Prometheus scout cruiser with a cost of 9 won't be completed for 5 turns. When using @@ Partial Construction, the time delay between construction of the unit and its completion does not begin counting down until the full cost of the unit is paid. These extended construction times also apply to all @@ Repairs, @@ Field Repairs, and @@ Refits.

Units advance their construction times during the @@ Deploy New Construction step of the @@ Construction Phase each turn, beginning on the turn that the unit is first purchased. If the Prometheus scout cruiser with a build time of 5 turns was purchased on turn 3005.02 it would be completed in the Construction Phase of turn 3005.06. A unit cannot perform any actions while they are under construction. Once construction is complete, the unit can be deployed as new construction normally.

Extended construction times do not normally apply to @@ Productivity Increases or @@ Terraforming. However, should a CM want to apply extended construction times to these activities, it is recommended that the construction time for Productivity increases be equal to the new Productivity value and the construction time for terraforming be equal to the system's current Carrying Capacity.

"Scouts as Explorers"

In some settings, Scouts are commonly used to explore jump lanes and fulfill the same role as Explorer ships in VBAM.

Independent Convoys

Rather than building their own convoys, players may contract with independent convoy operators to secure temporary transport capacity. Civilian freight carriers like to make money and will manipulate the

market and capacity to do so. Between fuel prices, over capacity, and dock strikes, a player is likely to lose a lost of sleep and resources dealing with these independent convoys.

To hire an independent convoy, the player must place a bid for how much they are willing to pay for this convoy to perform a single cargo run. The minimum cost is 1 plus the number of jumps that the convoy will have to move. Each additional economic point bid gives the player a +1 bonus to his roll on the Independent Convoy Table, which determines how much transport capacity the convoy is actually providing.

Independent Convoy Table (2d6)

Roll	*Effect*
2	No capacity available, and no further independent convoy attempts can be made this turn
3	3 transport capacity
4	6 transport capacity
5+	10 transport capacity

The player must roll for each independent convoy, and you must accept/pay for the capacity before rolling another independent convoy. Each additional convoy has a cumulative -2 modifier to the die roll (i.e., the roll for a third independent convoy this turn is at a -4 penalty).

Independent convoys will not jump across restricted lanes without Scout escort, and will not jump into a contested system under any circumstances. The convoy is removed from play as soon as it completes its transport contract.

These are strictly independent carriers with no existing contracts with military or government entities. They provide a capacity strapped empire short term options at a cost until additional convoys can be built.

Colony Specialization

// can specialize colonial economies

// can only change specialization once very 12 turns

Industrial: doubles construction capacity; no income

Research: triple output in tech investment; no income or construction capacity

Mining: doubles output for income, no construction capacity

Agriculture: adds Utilized Productivity to population increase roll, no income or construction capacity

Off Map Systems

- If the system rolls a destination that is off the edge of the map, then this jump lane leads to an off map system. This is some other star cluster located beyond the confines of the map
- Off map jump lanes increase a system's trade value because they have a monopoly on trade heading out to the exotic civilizations that inhabit these distant regions
- Trade fleets in a system with an off map jump lane earn an additional 5 EP per turn
    - Or you could roll d6 for each off map lane and have that be its trade value, to make it vay. Then you'd have a marker on the map that would list that value.
- The idea is that it makes these otherwise "lost" jump lanes have some value in the game.

"Science Institute"

Build special science building in Ruins system to generate tech investment

Either in addition to or as a replacement to that rule

4.X ▸ Exploration Encounters

Pirate Cache

Pirate Base

Raiders

Trading Post

Alien Datacore

Alien Artifact

Random Events

~~Random Events occur in the End of Turn Phase and all results are applied in the next campaign turn. If they are one-time events they occur in their appropriate phase next turn. If they are permanent effects, they take effect immediately and are treated as if they occurred during the turn just ending, in the appropriate phase.~~

// I know this is really more of an optional rule, but with the discussion on the forum and seeing Wade's list I think it would be really nice to have it be standard, at least for this game variant

- There is a 5% chance every turn of a random event occurring
    - Could have this be a progressing, cumulative +5%, but that requires bookkeeping and I'm trying to eliminate as much of that as possible
        - The ticking counter would at least mean that the chance of a random event would get higher and higher every turn, making it more likely that it would happen to shake things up.
    - I vaguely remember rolling a d20 each turn and have a random event on a 20, so this tracks. Not sure that is necessarily the best way, but it works.
- The target of the random event is selected at random from those in the game (including NPE)
- Roll on the Random Event Table to see what happens

Random Events (d100)

Roll	Event Type	Event Description
	Resource	System gains 1 Carrying Capacity
	Resource	System loses 1 Carrying Capacity
	Resource	System gains 1 RAW
	Resource	System loses 1 RAW
	Resource	System gains 1 Census
	Resource	System loses 1 Census
	Resource	System gains 1 Morale
	Resource	System loses 1 Morale
	Resource	System gains 1 Productivity
	Resource	System loses 1 Productivity
	Economic	System income halved for 1d6 turns
	Economic	System income doubled for 1d6 turns
	Technology	Tech advancement cost reduced by 10%
	Technology	Tech advancement cost increased by 10%
	Technology	Build more advanced units???

? **Alien Explorers** A new NAW is discovered on the edge of space

? **Hyperspace Collapse** A random jump lane connecting to the target system is reduced by one class (major to minor, minor to restricted, or restricted to unexplored)

? **Hyperspace Survey** A random jump lane connecting to the target system is increased by one class (unexplored to restricted, restricted to minor, or minor to major).

Non-Aligned Objectives

- NAW receives a "mission" similar to WAP that mirrors MOO strategies to a large degree. The mission would give the NAW something to achieve and then a bonus for completely it, to give the NAW something to do.
- Instead of VP, the objectives should give the NAW some other reward that is a tangible benefit
- These objectives would effectively make it so that non-aligned worlds are playing a parallel game to the rest of the players, and are more interested in completing WAP style missions than they are competing for territory or other victory conditions

Militarist Objectives (d6)

1) Escorts: Build at least 12 construction cost of escorts (CT/DD)
2) Cruisers: Build at least 12 construction cost of cruisers (CL/CA)
3) Capital Ships: Build at least 12 construction cost of capital ships (CB/BB/DN)
4) Fighters: Build at least 12 construction cost of flights
5) Defenses: Build at least 12 construction cost of bases or minefields
6) Troops: Build at least 12 construction cost of ground forces

Diplomat Objectives (d6)

1) Trade: establish a new trade route

Intel Objectives (d6)

1) Espionage: perform a successful Espionage mission
2) Sabotage: perform a successful Sabotage mission
3) Propaganda: perform a successful Propaganda mission
4) Military Intel Pool: have Intel points = total Census in Military Intel Pool
5) Defensive Intel: have Defensive Intel = Census at all colonies

Technologist Objectives (d6)

1) Research: have total tech investment greater than or equal to tech advancement cost

2) Explore: explore a jump lane reroll objective if there are no unexplored lanes available

Expansionist Objectives (d6)

1) Colonize: colonize a new system
2) Build a base costing at least 6 in an adjacent system
3) Move a fleet costing 12 or more into an adjacent uncontrolled system

Infrastructure Objectives (d6)

1) Productivity: increase Productivity
2) Terraforming: Terraform a colony world
3) Build a Shipyard
4) Build a Supply Depot (reroll if there is already a supply depot in each inhabited system)
5) Build a Trading Post

Random Galaxy Generator

Hub based galaxy generator to pre-generate a map

"Custom Research"

Design your own unit instead of picking from a prebuilt force list

"Grand Fleets"

// double flagship CR + system CR to allow for bigger battles to accommodate players that want to play with larger fleets

"I think I should explain something--namely, my objection to the new combat rules. I've always been of what I've termed the Grand Fleet school--namely, a fleet that in Starmada would cost 10-20k points (!), and the 'new' rules with only one 'squadron' now makes it much more unlikely that I'll be able to do that." - murtalianconfederacy

3.X ▸ Strategic Redeployment

Flights and minefields may be strategically redeployed directly to a target fleet or system as long as they are in supply and a path can be traced between the two systems that doesn't contain any enemy fleet. These units are being transported to their destination using your empire's background logistical network and do not require the intervention of any player controlled convoys. This gives players a way to replace combat losses or reinforce their defenses after a hard fought battle.

3.X ▸ Mass Drivers

3.X.6 ▸ Bombardment Surrender

A bombarding fleet can demand the surrender of an enemy system if it is conducting a Population bombardment mission and there aren't any ground forces defending the system. If the bombarding player wishes to ask for their surrender, the next step is to roll d10 + Morale to determine whether or not the colonial government is prepared to accept the terms of the surrender. The system will surrender if the roll is less than or equal to its Census.

If a system that refused a bombardment surrender offer loses Census or Morale on the same turn, it will lose an additional 1 Morale to represent that popular support for the ruling government is waning because there are elements of the population that believe that resistance is futile and they should have surrendered.

ISD Research

This establishes which units are available at the beginning of the game based on the In-Service Dates (ISD) provided on their respective force lists. Any unit that has an ISD that is less than or equal to the starting Tech Year is immediately available. Meanwhile, units that have an ISD greater than the selected Tech Year will only become available after an empire increases its Tech Year by successfully researching new technologies during the campaign.

The force lists that are included for the sample empires contain unit classes that range in Tech Year from 3000 to 3024. The default starting Tech Year is 3000. In the event that a campaign lasts long enough that an empire increases its Tech Year beyond 3024, the players can use the @@ Creating Your Own Empire rules to add new unit classes to their force lists at those higher tech levels. Advanced force lists for the sample empires will appear in future supplements.

The VBAM campaign system

assumes that all technological improvements are

available in a chronological order, unless

otherwise contradicted by your source materials.

This means that each new unit type or

technology has an in-service date that lets the

player know when that item will become

available. As an empire's Tech Year increases as the result of tech investment, these new technologies will become available.

As an alternative option for settings where in-service dates are unavailable, tech advancements should instead give players a cumulative 25% tech advancement chance of developing a new unit or technology. If this option is used, players should roll a d100 after each successful tech advance. If the result is equal to or less than the cumulative tech advancement chance, then the player has made a breakthrough and one new unit or technology becomes available.

An empire's Tech Year is increased by 1 for every tech advance it earns. This unlocks any unit classes that the empire might have available at that new Tech Year. Empires traditionally receive one new unit class per Tech Year. This new class can either be a more powerful version of an existing unit (a next-generation heavy cruiser, for example) or an entirely new type of unit that the empire has never had available before. This unit unlock is the carrot at the end of the proverbial stick that makes tech advancement worthwhile.

You can find pre-generated force lists for the included

basic alien factions later on in this book. These empires have units available through Tech Year 3024. These lists let players know exactly what units their empires are eventually going to be able to build during the game and at which Tech Year they can expect them to become available. In the unlikely event that an empire advances beyond the maximum Tech Year show on these force lists, you can use the rules in 5.4 Creating Your Own Empire to design more advanced units to fill out its force list with additional units at those higher tech levels.

Civilian Bases (tentative)

- My recommendation for a way to represent commercial infrastructure without a separate stat
- Would have three separate sizes (Small, Medium, Large). Start with one for 20 EP, then upgrade for 40 EP (Medium) and 60 EP (Large)
- Increases system trade value by +2, +4, and +6 respectively

Chapter 5 ▸ Scenarios

// become optional, you can select a scenario if you don't want to set up a traditional start-from-scratch game.

// Scenarios should mirror Chapter 2 for campaign setup to a degree, with clear rules for setup, and maybe additional commentary.

// Make Scenarios more flavorful and ready to play, maybe even specify what units are where? I just want to make these more useful

- To the point on above, I think the scenarios would work better if they specified exactly what each empire had available and make it easier to just pick up and play the scenario. And have some better defined objectives.

// Has anyone used any of the scenarios before? Or should they go to another book and use this space for more optional rules or expand other areas of the book?

that can be used with any scenario are included in the appendices.

Triangulation

Barbarians at the Gates

Creating Your Own Scenario

Many scenarios include star maps that have been tailored to their specific setting as part of the scenario package. If you don't want to use a pregenerated map, you can instead choose to randomly generate a new map using the 2.5.3 Random Galaxy Generator.

The generic maps found in this book are included for players who either want to play on a predefined map or that don't have the time to create a random galaxy

map. The generic maps come in five different sizes: These maps are compatible with all of the scenarios listed in 5.1 Sample Scenarios. Statistics for each of the systems on these maps can also be found in the appendices. These values can be altered by the CM to suit their needs or they can be used as-is in any game.

Political Situation

Scenario rules often establish the political situation that exists at the beginning of the game. This lets the players know who their friends and enemies are at the start of the campaign so that they can plan accordingly when it comes time to start purchasing and placing their starting forces.

If your scenario doesn't specify the starting diplomatic relations between each of the player empires, the players are free to engage in negotiations before the game to determine what treaties they want to have signed with their opponents at the start of the game. Importantly, this lets them enter into trade agreements that they can then use to place Trade Fleets in each others territories when they are purchasing their starting forces.

All of the treaties that players sign before the game are publicly revealed before moving on to the next step of campaign setup. This ensures that everyone knows where they stand with their neighbors, and it gives them a chance to see a clear picture of the political landscape before they begin purchasing and placing their starting forces.

CMs may want to impose limits on just what kinds of treaties that their players can sign before the game. Allowing players to form pre-game alliances can have a disruptive effect on the game if it forces their opponents to use more of their limited resources to defend against the alliance. Under normal circumstances these resources would've been used to grow and expand during the early game, and an empire whose growth is stunted during the early game might not be able to recover if conditions aren't right later on in the campaign.

Starting Forces

Players are normally given a fixed number of economic points that they use to purchase starting forces for their empires before the game. The number of economic points each player has to spend varies from scenario to scenario. When the amount of points to purchase starting forces is not defined, a default of five (5) times the player's total System Income is used. This is normally enough economic points to field a respectable military at the start of the game. These points can be spent on units of the player's choosing that are available to his empire. Unit availability is based on the Tech Year that the empire

is beginning the campaign at. All units that have an ISD less than or equal to the empire's starting Tech Year are available to the player. For example, if a campaign has a starting date of 3005 the players can only purchase units off their force lists that have an ISD of 3005 or earlier. A player won't gain access to any of the more advanced units off his force list until his empire's Tech Year increases during the game.

In addition to the units on their own force lists, players may also purchase units off of the universal list which contains a selection of basic campaign units that all empires are able to build regardless of their Tech Year. This includes things like Supply Depots, Orbital Shipyards, Planetary Shipyards, and convoys. If your empire seems to be lacking a certain type of unit, you'll probably find a unit on the universal list that can serve in that mission role.

Some scenarios also give your empire a number of free starting forces that are in addition to those that you can purchase with your initial allotment of economic points. It's fairly common for scenarios to give empires one or more free Supply Depots, Orbital Shipyards, Planetary Shipyards, or convoys. This ensures that the empires will start with a certain level of basic infrastructure already in place regardless of how they spent their starting points.

The total amount of economic points spent on starting forces cannot exceed the number of economic points that the empire was given to purchase starting forces with. Any points that the player doesn't spend are placed into his empire's Treasury and will carry over to the first campaign turn. It's best to spend as many of your starting points as you can during campaign setup. Spending fewer starting points gives you more purchasing flexibility once the campaign begins, but you'll likely be placed at a disadvantage compared to any of your neighbors that spent all of their starting points on military forces.

Players are free to adjust the number of economic points their empires have available to spend on starting forces before the game. Increasing the

number of economic points that players are given to purchase starting forces is an easy way to jump start

Chapter 6 ▸ Alien Empires

Ten sample empires are included with this product that you can use in your campaigns. Force lists for each of these empires can be found at the end of this book. These alien factions give you a selection of ready-made empires that you can pick up and play "out of the box" without having to create your own custom empires. Future campaign supplements will provide additional empires that you can use in your campaigns.

6.1 ▸ Brindaki Empire

Supply, Suppression, Q-Ship, Blockade Runner

6.2 ▸ Centauran Confederation

Fire Control, Minesweeper, Interdictor, Slow

6.3 ▸ Graal Kingdoms

Fast, First Strike

6.4 ▸ Human Commonwealth

Explorer, Missile, Carrier, Police

6.5 ▸ Jain Khanate

Gunship, Assault, Ammo, Missile

6.6 ▸ Kili Republic

Scout, Guardian, Jammer, Hospital, Minesweeper

6.7 ▸ Loran Imperium

Armored, Carrier, Strikefighter, Shock

6.8 ▸ Senorian Federation

Missile, Stealth

6.9 ▸ Tirelon Theocracy

Atmospheric, Disruptor, Boarding, Tender, Marines

6.10 ▸ Yishochi Hegemony

Minelayer, Mobile Shipyards, Shields, Auto-Repair

6.10 ▸ The Precursors

The Precursors are a collection of alien species that appear to have dominated this area of the galaxy several thousand years ago. Precursor relics have been found scattered across dozens of worlds in this region of the galaxy, including everything from abandoned colonies to lifeless derelicts.

Despite the seeming ubiquity of these Precursor artifacts we still know very little about them or their empire. Research has shown remarkable similarities between ships and outposts that belonged to different Precursor species, which seems to indicate that they were members of a shared galactic civilization. Some believe that the Precursor empire was forged out of galactic conquest and war, while others believe that they were a peaceful federation of alien worlds. Unfortunately, due to the sad state of most Precursor tech that we've been able to salvage, we'll probably know all of the facts about these ancient starfarers.

# # #

//The following is a catalog the Precursor vessels that may be encountered:

// include force list at Era V or VI designs, whatever is one step above the sample empires

// when a derelict anomaly is found, players spend the economic points on derelicts of their choice from the list; this overcomes the core issue of having too many derelicts or having to roll on a chart for them

6.11 ▸ Creating Your Own Empire

If you don't want to use any of these sample empires you have the option of creating your own empire. This section discusses how you would go about creating a unique force list for your empire. A force list includes all of the starships, flights, bases, minefields, and ground forces that an empire is capable of researching and building during a campaign. An empire's flavor and theme are therefore defined by the units that appear on its force list.

// the discussions of removing squadrons and buffing flights would allow us to simplify the unit construction rules insofar as calculating CP is concerned; this is because CC would no longer be paramount to task force setup

- Change CR/CC to be based on class possibly, so that they were fixed elements that you didn't pay to increase? Would require a new Command (X) ability to allow for certain units to have better command and control abilities
- Allows construction times to be standardized at Construction Cost / 2 (round up), rather than having two different systems for ships and bases.

+2% CP per Tech Year

Bases & Minefields get +50% starting CP compared to base hull at that Tech Year

Many scenarios come with a number of different empires that are specific to the setting or universe that the scenario is attempting to recreate. A two player scenario that depicts the events of the Human/ Centauran War would include the Humans and Centaurans as the two playable factions, for example, and anyone that plays that scenario would have to choose one empire or the other. Players should stick to the empires that come with their chosen scenario (if any are provided) unless they are experienced enough to know what kinds of changes they need to make to adapt other empires to that scenario. Substituting one empire for another in a scenario can lead to unexpected game balance issues, especially in scenarios that give exact details about the type and location of the forces each empire starts out with at the beginning of the campaign.

Tech Eras

Era I (2990-3000) Base CP

Era II (3001-3006) +10%

Era III (3007-3012) +20%

Era IV (3013-3018) +30%

Era V (3019-3024) +40%

- The advantage of these Era based tech modifiers is that all units in an Era have the same modifier, so you don't have to worry about calculating tech bonuses for every Tech Year; you just apply the modifier for that Era.
    - Example: A Heavy Cruiser (20 CP) class with a ISD of 3014 would be a Tech Era IV design with a +30% CP bonus, giving it a total of 26 CP to spend on stats and abilities.

- Another advantage is that Tech Eras can be easily expanded to cover more than 6 years of time. They could easily be 10 years or 20 years depending on your setting.
    - For example, with the FASA Star Trek ships, you could easily have about 10-20 year blocks for each major phase of the background, going from about the 2200 period on to 2300. That would let you fit in all of the various FASA units on each force list without having to worry about per-year improvements. You just hit watershed advancement points periodically as you go.
- Something that I'd already considered doing for another book that works with this system even better is to create a large list of ships and variants that are available in each Tech Era and then let the player choose a unit from the appropriate Era list when his empire advances its Tech Year. Once you hit a new Era, you then start picking ships off the more advanced Era list.
    - This accommodates settings that either have more units available (canon or non-canon) than would fit into a 6 turn era. It also makes it easier to build force lists for some empires because you can group them by era and design their stats and then let the players decide in which order they unlock them (or if they unlock them at all, if there are more unit classes available than there are "slots" in that era).

// updated unit classes

I moved this to the my conversion book from where it was originally, but here is the updated breakdown of ship classes:

Class	Abbr	Cost	Maint	CC	CP
Corvette	CT	2	1/6	1	8
Destroyer	DD	4	2/6	1	12
Light Cruiser	CL	6	2/4	2	16
Heavy Cruiser	CA	8	2/3	2	20
Battlecruiser	CB	10	2/2	3	24
Battleship	BB	12	3/2	3	28
Dreadnought	DN	16	4/2	4	36
Superdreadnought	SD	20	5/2	5	44
Titan	TN	24	6/2	6	52
Light Fighter	LF	1	1/16	1	4
Medium Fighter	MF	2	1/12	1	6
Heavy Fighter	HF	3	1/8	1	8

Superheavy Fighter	SHF	4	1/6	1	10
Light Ground	LG	2	1/6	-	6
Medium Ground	MG	4	2/6	-	9
Heavy Ground	HG	6	3/6	-	12

// the reason for the construction changes is that the changes to the CSCR makes CC less of a crippling design issue than it was before and allows for a more linear progression of CP. Corvettes are the most point efficient, but they are also the easiest to destroy.

// The elimination of Gunboats and Frigates from the progression allows for a better progression overall, and makes it easier to convert ships on the small end because you just have to fit them into one of two slots, and we don't have to try and balance the other two

// Ultralight Fighters and Commandos are similarly jettisoned because they aren't interesting enough to keep, and this allows for better balance.

// Ground forces must pay for their D Factor, and minimum D Factor is d2. Cost is equal to the die value (d2 = 2 points)

Chapter X ▸ "Unit Design Rules"

X.X ▸ Special Abilities

// I think the special abilities need to be defined here rather than in the back of the book, that way players will have some idea what they do. Otherwise it's kind of undefined until they run into them later in the book

// Special abilities that have an asterisk (*) after their name may be purchased multiple times and each function has a construction point cost as shown on XXX.

Ability	Cost	Maint	CP Cost	Ship?	Base?	Flight?	Mine?	Ground?

Space Abilities

"Ammo Heavy / Matter / Kinetic"

- Uses weapons with limited ammunition reserves and has a harder time operating out of supply
- Loses an extra 1 AS and 1 AF for every 2 out of supply levels it earns
- Possibly also get a bonus when in supply? So it's a give and take situation where it fights better when it's in supply, but knock it out of supply and it starts losing stats rapidly

Armored

- Cannot be damaged by leftover damage
- Alt: Can only be attacked using directed damage
    - This would reflect that the ship if very strong, but if reduced to 0 formation then they are still going to be susceptible to damage; plus at that point they can still take leftover damage, making the ability less overpowered

Assault*

Assault ships are used to support troops during planetary @@ Invasions. The number of Assault functions required to support a ground unit during an invasion is equal to its Construction Cost. Normal ground forces receive their full Attack strength when they invade from transports with Assault support, while Marines receive a +1 Attack bonus when they are invading with Assault support.

- Support ground force invasions as per 2E
- Still doesn't carry ground forces like they did in 1E, because that was madness.

- Include Security ability function of improving formations of friendly units for the purposes of boarding operations

Atmospheric

Atmospheric ships and flights have airfoils or antigravity propulsion systems that allow them to operate both in space and within a planetary atmosphere. These units can be built in systems without using a shipyard (@@ Planetary Construction).

Ships that have CC > 1 also receive a +1 Maintenance Cost modifier.

All flights are considered to be Atmospheric unless otherwise stated, and they receive the Atmospheric at no additional cost. Non-Atmospheric flights gain a +1 bonus to the stat of their choice (DV, AS, or AF) and can only be based from ships and bases, never from planetary fighter garrisons.

- Atmospheric ships and flights can be built in any system (system acts a Shipyard for these purposes)
- Flights receive Atmospheric at no additional cost, but flights that are specifically Non-Atmospheric get a +1 bonus to the stat of their choice
    - Covers the rare situations like the EA Starfury that is non-atmospheric

Auto-Repair

Auto-Repair allows a unit to perform @@ Field Repairs on itself (and only itself). Its owner must still spend economic points to complete these repairs, of course. Bio-organic starships commonly have the Auto-Repair ability to represent their natural ability to regenerate hull damage over time. Technologically advanced ships can also have automated damage control systems that serve a similar purpose.

Auxiliary

- +50% CP, but unit does not cripple; it is destroyed when it takes damage equal to its DV
- Boarding ships capture instead of cripple/destroy Auxiliaries

Blockade Runner

Boarding

Boarding units deploy marine boarding parties to enemy ships in an attempt capture them. A Boarding unit receives 1 point of directed damage per Boarding function that can be used to attempt to capture enemy ships or recapture friendly ships that the enemy already captured earlier in the battle (see @@ Capturing Ships & Bases). For example, a Boarding 3 ship could score up to 3 damage per turn as directed damage to try and capture ships.

Carrier

Carriers are dedicated to the fighter operations role. They have advanced hangar facilities that make it easier to repair and rearm damaged fighters during a battle. ~~As a result, all flights that are based from a dedicated Carrier unit gain a +1 DV bonus.~~

- Based flights can be equipped with special ordnance or mission packages, giving them a +1 bonus to DV, AS, or AF (player's choice).
- Alternative: +1 formation to all flights launched from Carrier??

Dedicated carrier craft are able to outfit fighters for a number of specialized combat missions. The flight crews just have to swap out modular weapon or sensor mounts to reconfigure the fighter for its new mission.

Every flight that is based from a ship or base with the Carrier special ability can choose to receive a +1 bonus to its DV, AS, or AF each combat round to represent the type of special combat package that the flight has been outfitted with that round. This bonus replaces the static +1 DV bonus that flights normally are granted by Carrier.

Command*

- +1 CR to task force flagship
- Cannot increase the flagship's CR above twice its starting value.
- Represents dedicated flag bridge of C3 (command, control, communications) equipment
- (+1 Maint, 2 CP)

Diplomatic

Diplomatic vessels are used to convey ambassadors to foreign capitals so they can conduct negotiations with their alien counterparts. As part of this mission these units have luxurious VIP quarters complete with special environmental controls to accommodate species with different atmosphere requirements, advanced linguistic translation software, and spacious conference rooms. These units allow empires to remain in contact with each other even if they aren't capable of maintaining sustained contact (@@ Diplomatic Contact).

Disruptor

Disruptors are adept at breaking through enemy defenses and striking deep into enemy squadrons. A good example of a Disruptor unit is a ship that excels at making successful flanking attacks against exposed targets. This ability can also be used to approximate the effects of slow firing heavy weapons that do massive damage and are hard to hit, such as a massive spinal cannon that has to recharge for a long period after firing. ~~For each point of Disruptor rating, the unit can lower the Formation Level of one enemy ships or base by 1. The decision to do so is made during the Assignments Phase~~.

Experimental

- A rare class that is more advanced than normal, but far more expensive to operate
- Treated as if it was 1 Tech Level higher for purposes of calculating CP, but maintenance is much higher
- Used to represent technology concept designs in some source materials where an empire has a highly advanced unit class that is outside the ordinary for their fleet

Explorer

Explorer ships are vessels that are specifically geared towards long range exploration and the mapping of new jump lanes. These ships have advanced sensors that make it easier for them to perform hyperspace surveys of previously unexplored jump lanes. Explorers have an effective Explorer value equal to their Command Cost for the purposes of @@ Jump Lane Exploration and are the only types of ships that can perform @@ Jump Lane Improvements.

Because they are meant to spend much of their time exploring out on the rim of known space, Explorer ships only subtract 1 point from their DV values for every full 2 out of supply levels. This effectively doubles the length of time that they can spend out of supply before they are destroyed.

- (+1 Maint)

Fast

Fast ships can move across an extra jump lane each turn in addition to their normal movement. This means that a Fast ship could traverse up to three jump lanes in a single turn! Only fleets that contain all Fast ships can exploit this advantage. If even a single ship in the fleet doesn't have the Fast ability then the entire fleet must follow the normal movement rules. Units that are being transported aboard a Fast ship don't affect its movement capabilities, however.

~~The use of Fast ships to perform scout functions is traditional among technology-hampered powers. Every 2 Fast ships in a Task Force grants an additional scout function that the player can use during scenario setup. Fast ships used in this way may not be included in the Task Force at the start of the scenario. They are instead placed into the Reinforcements Pool.~~

Fire Control*

- Increases friendly AS/AF during Scout phase
- Accurate long range sensors that cut through enemy countermeasures and give friendly units the ability to better concentrate fire

First Strike

Units with the First Strike ability have long range weapons that allow them to deliver a devastating attack against enemy forces from outside normal engagement ranges. Massive dreadnoughts that are built around spinal lasers or railguns commonly have this ability. First Strike units double their AS and AF values on the first round of combat.

Stealth and Q-Ship units that go undetected before combat receive the First Strike ability in the first space combat scenario fought in an encounter. They lose the First Strike ability after it is used, as the element of surprise has been lost.

Guardian

Guardian units provide intrinsic support to their squadrons. These ships are equipped with excellent point defenses that they can use to protect nearby ships against incoming weapons fire. ~~A Guardian unit~~

~~can increase the Formation Level of one ship by 1 per Guardian function. These bonuses are assigned during the Assignments Phase of the combat round.~~

Gunship

These heavily armed warships excel in the orbital bombardment role. A Gunship adds 1 point to their normal bombardment value. For units that require multiple craft to earn a single bombardment point, such as a frigate that requires 3 for 1 bombardment point, simply increase the group's bombardment output by 1. Gunship frigates would generate 2 bombardment value for every 3 ships contributing to the attack, for example.

Hospital*

Hospital ships can be moved into a system to reinforce damaged ground forces and bring them back up to full strength. A Hospital ship may repair 1 Attrition per Hospital function each turn (@@ Attrition Damage Repair). Many empires rely on medical frigates to quickly replenish their ground force's Attrition losses.

Interdictor

Interdictors are equipped with special equipment that can prevents enemy ships and flights from retreating from a battle (see @@ Emergency Retreats). This effect is usually achieved by producing a blanket electronic jamming signal or gravitic distortion field that shuts down enemy jump drives to prevent them from leaving the area.

- Prevents the opposing task force from performing FTL retreats

Jammer

Jammer units negate enemy Scouts by actively jamming their sensors and confusing their electronic instruments. At the start of the combat round, a player reduces his task force's total Scout functions by 1 per point of Jammer rating in the enemy task force.

Kamikaze

Kamikaze vessels are outfitted with ramming prows or explosive charges that they can use at point blank ranges to damage enemy spacecraft. These sacrificial attacks always end in the destruction of the unit, but they score substantial more damage against the enemy in the exchange. ~~Kamikaze units provide twice their normal ramming strength when they ram during combat. This makes them highly effective in this role. These ships and flights can always be used to ram, even if the 4.11 Ramming optional rule is not otherwise being used in your campaign.~~

Kamikaze ships may make a special orbital bombardment attack against a system by plummeting through the atmosphere and impacting upon the planet's surface. The unit generates twice its normal bombardment value this turn, but it's destroyed after the attack is complete.

Mass Driver*

- Roll d6 for effect when used to bomb system: 1: -1 Cap, 2: -1 RAW, 3: -1 Census, 4: -1 Morale, 5: -1 Productivity, 6: Destroy Ground Force

- System receives the Devastated trait if it loses RAW to represent that it has been subjected to mass driver bombardment
    - Devastated trait could then be removed via terraforming?
    - Alternatively, Raw could remain the same but just reduce Capacity
    - System reduced to 0 Capacity is now completely uninhabitable; Devastated trait remains
- Reduces deadliness, but make it still very nasty
- Example: 3 Athraskala bombers (Mass Driver 1) are bombing Balos. They roll 3, 5, 5. The system loses 1 Census and 2 Productivity.
- Can now reduce RAW, too, potentially making a system potentially unusable.

Minelayer*

A Minelayer is a ship or flight that is built to transport and deploy minefields. A unit can carry one minefields per Minelayer function. These minefields are automatically deployed into the player's task force when the Minelayer is in the task force, and they don't count against the task force's normal mine deployment limits. Minelayers are the only way that players can deploy minefields outside of a Defensive Scenario.

Minelayers may deploy some or all of their minefields to their current system location during the Minelaying step of the Supply Phase. Deploying mines to a system lays a defensive minefield that will remain in the system until they are recovered by friendly Minelayers during a later Supply Phase.

Minesweeper*

Minesweepers have special weapons or electronics packages that allow them to scan for, detect, and clear enemy minefields. Minesweepers are the only units that can destroy enemy minefields that are encountered outside of combat. A Minesweeper can destroy one enemy minefield per Minesweeper function, regardless of the cost of the minefield, when deployed during the Minesweeping step of the Supply Phase.

In space combat, Minesweepers provide their task forces with free directed damage equal to their total Minesweeper value in the Ship Fire Phase that can be applied against minefields in the enemy task force. This gives players a way to neutralize enemy minefields during the battle to remove the enemy's defensive advantage.

Example: The Pegasus destroyer is a Minesweeper 2 unit. A single Pegasus could destroy 2 minefields per turn during the Minesweeping step in the Supply Phase. A group of 4 Pegasus minesweepers could destroy up to 8 enemy minefields per turn.

The Pegasus can also damage mines in space combat scenarios. Each active Pegasus will score 2 free directed damage against minefields in the enemy task force during the Ship Fire Phase. This would be enough to eliminate a single Basic Anti-Ship minefields (DV 2) every round.

Missile

Missile units are armed with expendable missile, torpedo, or drone weapons. They can be outfitted with mission-specific ordnance packages to configure them for different mission roles and improve their combat effectiveness. A Missile unit may equip a total size of ordnance packages of the player's choice

from the list provided below equal to its Command Cost. Players assign ordnance packages to their Missile units during the Adjust Ordnance step of the Supply Phase.

Missile units pay for this flexibility by relying more heavily on supply lines for replenishment. Out of supply Missile units lose the benefits of their equipped ordnance packages and cannot make changes to their ordnance loadouts. The ordnance bonuses are restored once the units are back in supply, however.

Ordnance Packages

Ordnance Type	*Combat Bonus*	*Ordnance Size*
Long Range	+1 DV	1
Heavy	+1 AS	1
Anti-Fighter	+1 AF	1
Comm Drone	+1 CR	1
Piercing	+1 Disruptor	2
Chaff	+1 Guardian	2
Bombardment	+1 Bombardment Value	2
Jammer	+1 Jammer	2
Proximity	+1 Minesweeper	2

- +1 Maint

CM's Note: *When designing a scenario, you can limit which ordnance packages are available to each empire at the start of the game and then introduce the remaining ordnance packages as the empire earns new tech advances.*

Mobile Shipyard

These massive vessels are used to build ships and flights. A Mobile Shipyard has a construction capacity equal to its rating. For example, a Mobile Shipyard 7 would have 7 construction capacity that it can use to build new vessels. Mobile Shipyards can only build units when they are in supply, and they can't move on the same turn that they are carrying out construction orders. These construction orders are canceled if the construction ship is forced out of supply or moves.

Q-Ship

A Q-Ship is a warship that is indistinguishable from a normal freighter until it reveals its true nature by arming weapons or performing other actions that are inconsistent with the behavior of a civilian transport. One Q-Ship can be concealed for each friendly convoy in the system (@@ Stealth & Concealment). The Q-Ship cannot be detected by enemy Scouts and remains hidden until the owner

decides to reveal its presence or its attached convoy is attacked, even if the enemy completes a successful Espionage mission against the Q-Ship's system or convoy.

A player may add one Q-Ship to his task force for each convoy already in the task force and these Q-Ships don't count against the task force's command limit. Q-Ships receive the First Strike ability on the first round of combat if they started out concealed in a convoy.

Police

Police units excel at running anti-piracy patrols in friendly systems. Ships and flights with the Police special ability count as two units when calculating a system's raiding chance (@@ Raiding). This demonstrates that Police ships are more effective in this role, and players require fewer Police ships to provide the same level of defensive coverage.

Proximity (Minefield Only)

- Owner may choose to expend minefield to score directed damage against enemy fleets during the @@ Phase. Total the DV of the detonating minefields; this is the amount of damage being scored. The minefields are then removed from play.
- +1 Cost.

Scout*

These vessels have powerful long range sensors and electronic warfare systems that let them have a major impact on space combat scenarios. Scouts may use their available Scout functions during scenario setup to influence conditions at the start of the battle or use them in combat to provide electronic warfare support for their task force. Scouts are also used to perform @@ Jump Lane Exploration and explore the galaxy for their empire.

- Used to explore and support combat operations by generating scout functions
    - At one point during 2E I had split the functionality of Scout and Explorer into two very different things, but then I merged them back together at some point before release.
    - Should Explorer be the only ships that get exploration bonuses? Some settings don't seem to make any distinction between the two, while others do.

Self-Replicating (Minefield Only)

- DV is doubled for the purposes of @@ Minesweeping.
- (+1 Maint)

Shields

Some units are protected by energy shielding, a defensive technology which makes a unit harder to damage. These defenses can take many different forms, and are collectively referred to as Shields. A shielded unit receives a +1 formation level bonus in combat until it is crippled, at which point the Shields fail and the vessel is left exposed.

Flights with the Shields ability have the option of disabling their Shields at the start of the combat round in exchange for a +1 bonus to their AS or AF (player's choice). The flights are effectively redirecting power from their shield generator to their weapon systems for a quick boost in firepower.

- Formation bonus, either a fixed +1 or else equal to CC / 2 (round up) so that it scales with the size of the ship. Fixed +1 works if this is a +1 Cost ability, while the CC /2 is best if it is a +1 Maint.
- Non-rated ability; only purchase once
- Flights can deactivate their Shields to gain a +1 bonus to AS or AF (player's choice)

Siege

- Counts as two ships for the purposes of @@ Blockades.

(+1 Cost)

Slow

Slow ships have slower or less reliable hyperdrives that limit their strategic speed. These vessels have a movement rate of one jump per turn, which is half that of a normal ship. Slow ships may still perform two jumps per Movement Phase if one of them is a major lane.

CM's Note: *System monitors are the most likely unit classes that would be given the Slow ability because they are intended for system defense and won't need to move between systems very quickly.*

(-1 Cost)

Stasis*

// freezes target in enemy task force; unit can't fire or use special abilities, but it can't be fired upon, either

Stealth*

Stealth encompasses a multitude of electronic countermeasures that are meant to make a unit harder to detect. This includes everything from anti-sensor hull coatings and heat collection/dissipation systems to full-blown cloaking technology. Stealth units are able to evade detection and move unseen through enemy occupied systems (@@ Stealth & Concealment). Stealth units that avoid detection receive the First Strike ability on the first round of combat.

~~During the Assignments Phase, any ship or base that has the Stealth ability can decide to cloak and try to evade the enemy. When cloaked, a unit increases its Defense Value and formation level by an amount equal to their Stealth rating. Units can't conduct fire during any firing phases as long as they are cloaked because doing so would give away their position. Once a unit is crippled it can no longer engage its cloak during the battle.~~

~~Stealth flights are especially dangerous because of their ability to move unseen on the battlefield. In the Assignments Phase, Stealth flights are not assigned to squadrons until all other flight deployments have been announced. This gives their owner the chance to see where enemy flights have been deployed before making their own Task Force assignments. Stealth flights also receive a bonus to a combat statistic~~

~~of the player's choice (DV, AS, or AF) equal to their Stealth rating. This bonus is declared when the flight is assigned to a squadron.~~

Strikefighter

Strikefighters are long range flights that are outfitted with their own jump drives, which give them the endurance needed to conduct successful @@ Carrier Strikes against targets in nearby systems. Unlike other flights, Strikefighters do not start battles in a crippled state when they are performing carrier strikes.

The Strikefighter ability may only be applied to flights. It is very expensive to add a jump drive to such a small vessel, but the strategic advantages can be well worth it, especially for smaller empires that don't have the resources to field a proper war fleet.

CM's Note: In other settings, rather than having their own jump drives, Strikefighters may instead incorporate design features that give the flight extra range such as improved crew comforts, better life support, or extra fuel capacity. The in-game effect remains the same, however.

(+1 Cost)

Suicide

Each Suicide vessel is equipped with a series of explosive charges placed at strategic locations throughout its superstructure. A "dead man's switch" automatically activates these charges if the unit is captured by the enemy. This makes it impossible for a Suicide unit to be captured by another empire. Note that the Suicide ability is an exception to the normal special ability rules and it is effective regardless of whether or not the unit is crippled.

- Unit cannot be captured; is destroyed rather than being captured
- (+1 Cost)

Supply*

Supply ships are fast combat support ships that have the speed to keep pace with military fleets. Supply ships allow fleets and colonies to trace @@ Extended Supply Routes. This extends the range at which an empire's fleets can operate away from friendly supply depots before they are out of supply. They can also perform @@ Field Repairs to repair crippled units.

Supply Depot

~~In addition to normal planetary supply depots, some orbital bases are also considered to be supply depots. Any base noted as a Supply Depot in its special notes is treated like a @@ Supply Depot.~~

- Bases only (for the sake of sanity) that turns them into a mobile supply depot
- Allows us to recreate Babylon 5 by having it be a Battleship sized starbase with the Supply Depot ability. Then when B5 declares independence it can actually survive on its own.
- +10 Cost, +2 Maint

Suppression*

- Used to reduce enemy AS/AF
- Ion weapons are a good example, or any active countermeasures that can confuse enemy targeting computers.

Tender*

These vessels are capable of docking corvettes either internally or at external docking ports for long distance travel. Each point of Tender allows a ship to carry a single corvette. Corvettes that are based from a Tender don't count against a task force's normal command limits. The command overhead of these units is effectively being paid for by the Tender itself. A Tender cannot carry units that have the Tender ability themselves.

If a Tender is destroyed in a battle, all of the corvettes that it was carrying are moved back to the reinforcements at the end of the round. However, if a Tender is destroyed outside of combat, all of the ships that it was carrying are destroyed along with it.

Trade

~~Trade ships are warships that perform double duty as armed merchant liners. Trade ships that are assigned as 3.3.6 Convoy Escorts to a convoy cost nothing to maintain because they are earning enough money from running cargo missions on the side to cover their normal Maintenance Costs.~~

Towing*

- Restore strategic movement to crippled ships ~~(but not Slow)~~
- 1 Towing function will tow 1 crippled unit
    - This is simpler than having it be based on CC
- Allows them to move as normal ships
- Crippled Fast ships move as normal ships, too, do not get faster movement
- Could also be used to tow bases if that is something that we would like to allow, but in that case I would make the cost sufficiently high (Towing functions = construction cost) to make it impractical outside of towing some small bases (corvette sized satellites) around.
    - Maybe the max cost of base that a tug can tow is equal to its Towing rating, and multiple ships can't combine Towing functions? That would mean that a Towing 4 tug could move a 4 EP base, but to move a 8 EP base it would need Towing 8. That should make it pretty difficult to achieve.
- **Do we want tugs to be able to have a combat bonus? Ex: if a tug is moved from the task force to reinforcement it can take one ship back per Towing function? Putting the tugs on the front line is already going to be kind of a foolish move**

Ground Abilities

Marines

Peacekeeper

Credits

The **Victory By Any Means** universe is constantly growing. Please visit us at www.vbamgames.com for game discussion, updates, battle reports, game ideas, and new source material. Feel free to drop us a line and join in the community discussion with game questions or comments.

Contributors

David Carswell

Tyrel Lohr

Jeremy Menefee

Keith Mingus

Jimmy Simpson

Geoffrey Stano

Owen Stith

Samuel Ulmschneider

John Voysey

Wadewan

Playtesters

Tyrel Lohr

Samuel Ulmschneider

Force Lists

Universal List

Universal List: Civilian Units

Class Name	Class	Cost	Maint	DV	AS	AF	CV	CR	CC	Special Notes
Convoy	Ship	20	1/2	10	0	0	0	-	-	Civilian
Supply Depot	Base	20	1/1	10	0	0	0	-	-	Civilian
Shipyard	Base	20	1/1	10	0	0	0	-	-	Civilian

Brindaki Empire

Jain Khanate

Human Commonwealth

Starting Era: Human Commonwealth

Class Name	Class	Cost	Maint	DV	AS	AF	CV	CR	CC	Special Notes
Sparta	DD	5	2/6	3	3	3	0	3	1	Atmospheric
Europa	CL	6	2/4	4	2	2	4	4	2	
Apollo	CA	8	2/3	6	4	3	1	6	2	
Prometheus	CA	9	4/3	6	2	2	2	4	2	Explorer, Scout 2
Marines	GND	4	3/6	2	2	3	d2	-	-	Marines

Saber	MF	2	1/12	2	2	2	-	-	-	Atmospheric

Loran Imperium

Starting Era: Loran Imperium

Class Name	Class	Cost	Maint	DV	AS	AF	CV	CR	CC	Special Notes
Chaete	DD	4	2/6	3	3	1	2	3	1	
Stercoralis	CL	6	2/4	4	2	2	4	4	2	
Lida	CA	8	2/3	6	2	2	5	5	2	
Nest	Base	?		7	9	5	5	?	?	
Thralls	GND	4	1/8	2	2	2	d3	-	-	
Segment	LF	1	1/16	1	1	2	-	-	-	Atmospheric

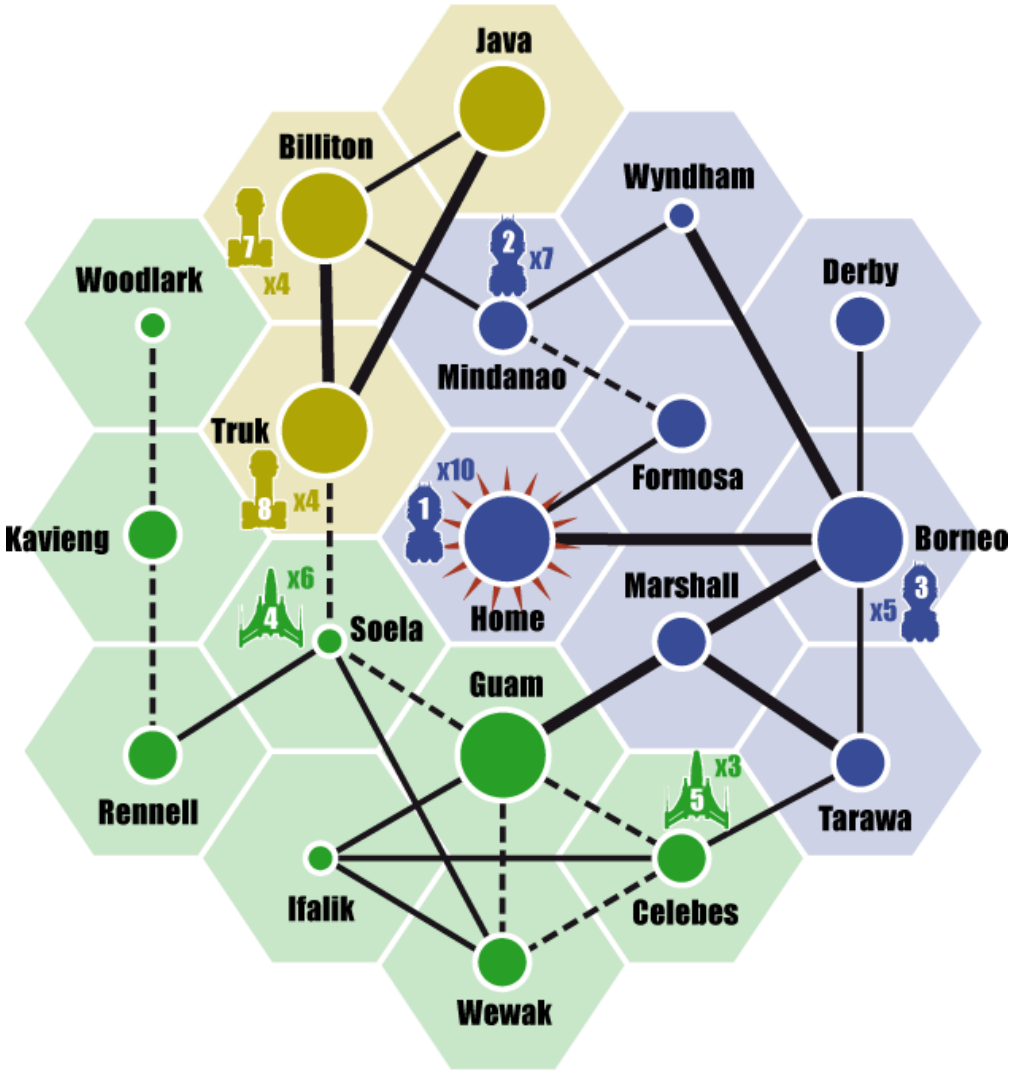
Era I: Loran Imperium

Class Name	Class	Cost	Maint	DV	AS	AF	CV	CR	CC	Special Notes
Merte	CL	7	3/4	5	1	2	4	4	2	Scout 1
Hook	MF	2	1/12	3	4	0	-	-	-	

Kili Republic

Senorian Federation

Tirelon Theocracy



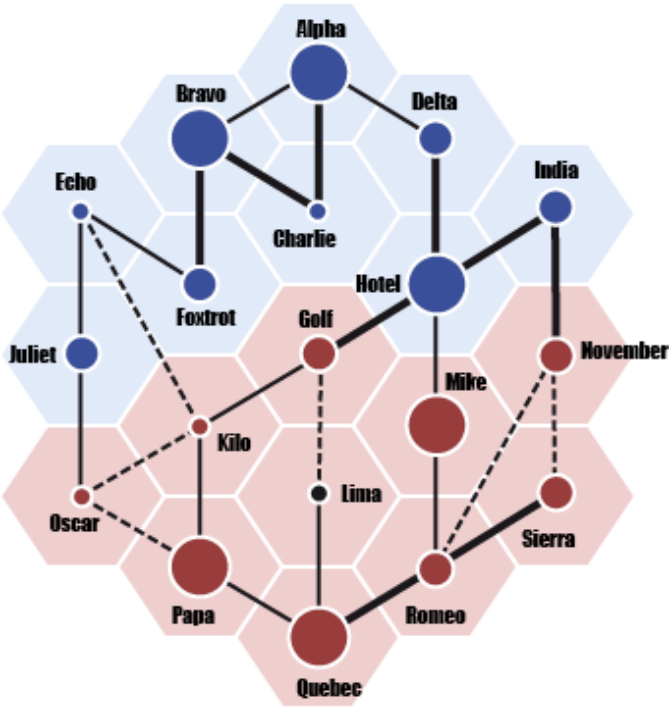
Second round of movement examples with new system

- Blue Fleet #1 in the Home system is not crippled and is comprised of 10 ships. It does not contain any Scouts. I could move from Home to Borneo, then Borneo to Marshall, and then finally Marshall to Guam in one turn. The fleet has two normal jumps, plus it can jump across one major lane per turn in addition to its other movement.
    - Blue Fleet #1 could not jump to Formosa and then on to Mindanao because it doesn't contain any Scouts.
- Blue Fleet #2 comprised of 7 ships in Mindanao can move to Billiton where it will encounter Yellow Fleet #7 that is comprised of 4 ships. The Blue player could stay and have the encounter, or else leave 4 ships behind and proceed to Java or Truk (depending on what his movement orders were). Blue Fleet #2 does not have enough ships, but if it had more than 4 ships and one of them was a scout it could leave 4 ships in Truk and then make one last jump to Soela. That would be two jumps, plus the one free major lane jump for the turn.

- Green Fleet #3 in Celebes is crippled, Slow, or out of supply and is limited to 1 jump per turn. It does not have a Scout. It could jump from Celebes to Ifalik or from Celebes to Tarawa. If moving to Tarawa, it would still get its free major lane move as an option and could jump to Marshall as there are no Blue fleets in Tarawa to impede its movement.
- Green Fleet #4 in Soela is Fast and contains a Scout. It can be given orders to jump from Soela to Guam, Guam to Marshall, Marshall to Borneo, and Borneo to Home. This is a total of four jumps. Green Fleet #4 is Fast and gets 3 jumps normally, plus the 1 free major lane. Green Fleet #4 will encounter Blue Fleet #3 in Borneo at which point the Green player can choose to either stop moving or leave behind 5 or more units (matching the number that the Blue player has in the system). Green Fleet #4 only has 6 ships, so their movement would stop at that point.

// out of supply ships move as if they were crippled? Would represent a lack of fuel

// Minefields = should they attack any enemy units that enter the system? A free attack that can't be defended against? Or should they just stop all movement and act as a "speed trap" to prevent enemies from pushing forward? The speed trap option would be easiest to implement, and would make mine warfare more interesting when fighting a defensive strategy, especially along a series of major lanes that the invader would otherwise be able to use to quickly access the interior of your empire.



Movement Example Testing:

#1) A fleet is currently in Alpha. It could jump from Alpha to Bravo (one jump) and then move to Foxtrot (free major lane) and then to Echo (second jump).

#2) The fleet in Alpha could jump to Charlie and then to Bravo in one jump (one major lane, then your normal jump), then jump from Bravo to Foxtrot (major lane) and on to Echo (second jump).

#3) If the fleet from #2 was Fast, then upon arriving at Echo it could make another jump to either Juliet or Kilo.

#4) A fleet is in Kilo. If it jumps across the restricted lane to Echo or Oscar it would immediately end its movement (it wouldn't get a second move). It could jump from Kilo to Golf and then on to Hotel on its first move (one jump plus a major lane), and then on its second move it could jump from Hotel to Delta and on to Alpha (major and then normal jump).

// Another way of handling this that might make it cleaner is to have fleets make one jump at a time until they run out of movement, but then major lanes would have to cost 0 to move, and you would be able to fly down them like they didn't even exist.