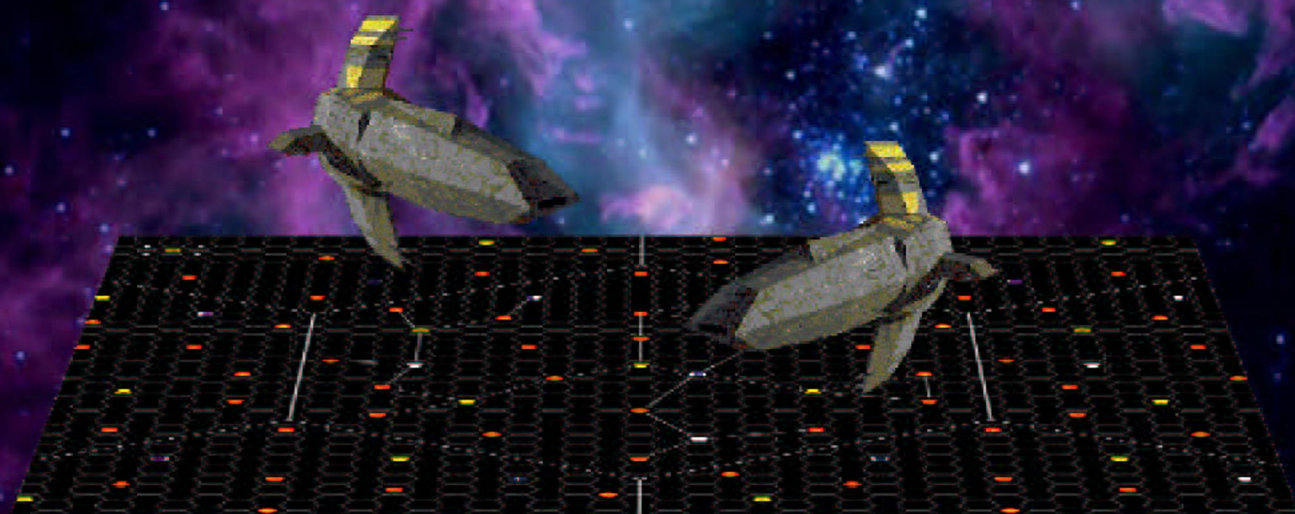


# ASFOS CAMPAIGNS: STELLAR EMPIRES



**Simple generic rules for developing and playing in  
your own interstellar wargame campaigns.**

# Stellar Empires

## ASFoS Campaigns v3

### Introduction

Welcome to ASFoS Campaigns : Stellar Empires, generic rules for developing and playing in your own interstellar wargame campaigns.

I believe campaigns add a little spice to wargaming. The battles we play take on greater meaning when their results determine if an empire shrinks, or continues to expand on its way to galactic domination. Scenarios are continuously generated just by playing, complete with background, purpose and variable victory conditions. Our battles become chapters in an ever developing story. I think campaigns take wargaming to the next level.

Stellar Empires is an attempt to accomplish this; a set of strategic campaign rules to allow players to take on the roll of a head of state and guide a star empire through its growing pains, its trials and tribulations, to final victory. You'll manage resources, build infrastructure and fleets, explore and colonize new systems, and use either diplomacy or brute force to deal with your neighbours. Your strategic decisions determine your chances of eventual success or failure.

Stellar Empires are generic rules, there is no specific background forced upon the user. This allows you to play in whatever setting you prefer. Invent as much of your own universe as you like, or borrow from the sci fi background of your choice. The generic nature of the rules will work equally well for either.

You are definitely not required to use all the rules, pick and choose the ones you like, to create the complexity level that you enjoy.

These rules are written from the point of view that the reader intends to use ASFoS as their tactical combat rules, but work fine even when matched with any of the many other fine sets of starship combat rules on the market today.

### Limitations

Stellar Empires is meant to provide players with the basic rules and framework necessary for campaign play.

However, for this to work, the player controlled aspects of a star empire need to be determined. I believe the players take the role of the empire's government (or whatever group controls the empire's destiny), in which case all aspects of the campaign rules should fall into 2 categories –

- things that are government run and therefore under the players control
- and things that aren't

The rules for government run features will need to have some depth, since these rules are what the players will be using to advance their empire. Rules for other aspects of the campaign can be more abstract, to simplify the campaign a bit, and to give the players a feeling of some things beyond their control.



If you are looking for a simpler game, there is no reason why you can't leave some parts of the following rules out of your campaign. While some sections will be required at least in part (movement, economics) there's no reason why other parts or even entire sections (Fields of Research) can't be simplified or ignored completely.

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# Galaxy Creation

Let there be light - so we can see the map.

## Required Materials

- this copy of Stellar Empires rules
- a computer, or pen & paper to keep track of the turns
- percentage dice (d10's) and 6 sided dice (d6's)
- a set of rules to play out any combats resulting from player moves

## GM or not GM

There are few questions more important than this one when deciding to start a campaign. While there are many different ways to run a campaign, there are two main types - those where every person involved is a player, and those controlled by a referee or moderator.

Stellar Empires can be played either way. There is enough depth to the rules to ensure an enjoyable game whether you decide to use a Game Moderator (GM) or not. Without a GM, the campaign is limited to what the players themselves know and control. With one, hidden objectives, special rules and unique victory conditions can be tailored to the players. Secrets can be kept from them.

## Turns & Time

For the purpose of Stellar Empires backgrounds, each campaign turn represents approx 1 year, although the turns can be made to represent any amount of time preferred by the players. When more precision is needed, the turns are designed to be broken down into quarters.

## FTL or Jump Routes

The players have to decide before the campaign begins on how they want interstellar travel to work. Do they want their starships to use FTL engines, or Jump engines and Jumproutes. These two types of travel should be mutually exclusive, one or the other is chosen as the method for interstellar travel when the campaign is first designed. Jumproute campaigns tend to resemble ground campaigns because they usually have routes of advance or retreat, chokepoints and holding positions, while FTL campaigns tend to resemble island hopping naval campaigns.

## Developing the Map

The Map is probably the third most important ingredient of an enjoyable campaign (the rules being second, and great players being first). If you have a favourite pre-made map in mind that you'd like to use, there's no reason why you can't. Making use of scifi backgrounds (including maps) from literature or TV/movies is a common, fun and easy way of designing campaigns. And as an added bonus, you could probably skip most of the rest of this subsection. Just make sure you make any adjustments necessary for the rules to work with the map you pick.

Stellar Empires is written assuming you intend to use a hex map. There is no actual need to do so, in fact you can use hexes, squares, inches or whatever measurement and type of map you desire. The rules are designed to work in all cases, although you may need to make some adjustments (either to the map or the rules) in the case of radically different map types in order to make sure the game continues to work.



Any map generating system you're already familiar with can be used, as long as you make sure you don't unintentionally create situations that the rules can't cover. For example, in a jumproute campaign making the average jump route on your map 10 hexes long would cause trouble when the players attempted to move, since the longest jump for the most advanced race possible under the rules is only 8 hexes. Stellar Empires assumes the map will have the stars, on average, about 3 or 4 hexes apart.

If you don't have a favourite mapping system, here's a simple one. Take a hex map of the desired size, and for each hex roll a d6. For each '6' rolled place a marker (or small erasable mark) in the hex. This should give you a star map with each 'star' averaging about 3 hexes apart. Of course 'average' means there will be areas where the stars clump together, and areas where very few stars exist. Remove some stars from the areas where there are too many, and add stars where there are not enough. The resulting map will still look like it was randomly generated, but without the problems caused by a truly random map.

If you intend to play in an FTL campaign the map is done, but if you intend to play in a Jumproute campaign you need to add the jumproutes. Measuring the distance in hexes between each pair of stars, roll a d6 - if the result is equal to or greater than this distance, a jumproute exists. Mark it on the map. If you wish to have more (or less) jumproutes, simply add or subtract 1 from the die. If a jumproute doesn't exist you might need to temporarily mark that as well (or you might lose track of which jumproutes have been already rolled for). You'll also need to decide if you intend to allow jumproutes to cross each other.

You should now have a playable map. Fancy it up as much as you wish, and start planning your campaign.

## Exploration Campaigns

If you are lucky enough to have a GM, the above method for creating maps can be used, and all systems pre-generated, with the results kept from the players until it is time for them to discover them. But if you don't intend to use a GM, then you should stop once the stars are placed on the map (since any starfaring race should be able to calculate the position of nearby stars, I always start with all the stars placed). The statistics for each system are not rolled for until the system has been successfully surveyed. In a Jumproute campaign, a jumproute should not be rolled for until a player attempts to map it, drawing it in if successful. In an exploration campaign you definitely need some way of recording where jumproutes DON'T exist, since it's unlikely you will remember otherwise.

## Player Empires

Decide if you want the campaign to be a Homeworld Only - exploration campaign, where players discover the galaxy (and each other) piece by piece, or an Old Empires in Conflict where the borders between star empires are well established and it just requires the match to begin the conflagration, or something in between. Each player should be given maps and data listing their starting resources and defining the systems under their control in a document called the Setup Document. Players will be responsible for deciding upon a species and species background, and designing their starting forces

## Tech Levels

Under the Stellar Empires campaign rules all empires are given a specific technology level which defines and controls many of their abilities and options. The basic concept for these levels is taken from the Tech Levels in the ASFoS starship combat rules.

The Tech Levels are defined as :

- 3 (low),
- 4 (average),
- 5 (advanced),
- 6 (very advanced).

## Setup Document

The information players receive in the setup document should include :

- any campaign scenario background or history required
- starmap (including known jump routes if used)
- home system location and system statistics
- any colony sites, locations and system statistics
- the empire's tech level (or Fields of Research and their starting levels)
- starting funds, and what they may be spent on
- starting forces and infrastructure and their locations
- any intelligence possessed about enemy or neutral locations and forces

## Campaign Conversion Value

If you intend to use Stellar Empires with starship combat rules other than ASFoS, (which it was developed for) some value is needed in order to keep the balance between the economic aspects of the game and the number of starships. In ASFoS the average cost for a battleship tends to be about 15-18 points. If the rules you're using has battleships costing only 5 points, then you may find yourself with an unmanageable number of them in no time. Conversely, if your rules have battleships costing 80 points, then you may have trouble affording any at all. The Campaign Conversion Value (CCV) is meant to help fix this problem.

You use it to turn your ship costs into Stellar Empires ship costs. You simply multiply your cost to get the Stellar Empires cost.

- *For example - rules X might have battleships cost 50 points, so rules X's CCV would be 0.3. Then, for all purposes, within Stellar Empires your battleships would be treated as if they cost only 15 points.*

The Campaign Conversion Value is more than just the battleship costs of course. It's a general average of all values and costs for all ships, stations and installations within the set of combat rules you intend to use.

Obviously, if you're using ASFoS as your combat rules, the CCV is '1', and you can actually ignore this whole subsection.



# Star System Values

The potential power of a Star Empire is based on the economic value of the star systems the empire controls, and the worth of each system is determined by its **System Values**. The 3 system values (and 1 resource rating) work together to define any system's current and potential future worth.

## Basic System Value (BSV)

Each star system is given a rating called the Basic System Value, which is an indicator of potentially how valuable the system is. This rating determines the system's economic potential, and gives us a base number to use in calculating the system's worth.

This Basic System Value is chosen randomly for each system by rolling 3D6. The higher the rating, the richer the system. Homeworlds are an exception and are assigned a BSV of 20.

## Maximum System Value (MSV)

The Maximum System Value represents the maximum value possible for the controlling civilization at their current level of technology. This number represents the absolute maximum that a system can be developed and therefore limits how valuable the system can become. A system's MSV is calculated by multiplying its BSV by **DOUBLE** the controlling civilization's **Tech Level**. The result is the Maximum System Value, the maximum possible worth of the system for the controlling Star Empire at its current level of technology.

- *For example - a system with a Basic System Value of 11, controlled by a civilization with a Tech Level of 4, would have a Maximum System Value of 88 (11 x 4 x 2).*

## Current System Value (CSV)

While the Basic System Value is an indicator of a system's economic potential, the Current System Value represents its actual value at the current time.

The Current System Value represents just how much a system has been developed and the amount of resources it produces. The CSV is the most useful system value, because it determines the income currently generated by the system and the upper limit of construction possible due to the availability of resources.

Unless a system begins the campaign already colonized, its starting CSV will be 0. A system's CSV can be easily increased, something usually done via **Economic Growth** (see economics). A system's CSV may never exceed its MSV. If a system's MSV increases during play, the CSV does not automatically increase along with it.

- *For example - a system with a MSV of 88 may have a CSV of only 28, generating 28 points of income per turn. This would represent a colony that has grown to less than 1/3 of its potential maximum.*



## Resource Rating (RR)

Although the BSV determines the basic value of a system, this number can be misleading. An average value for a system can represent either a large number of almost worthless barren planets or a small number of very valuable rich ones. Therefore another rating is needed to more accurately define the value of a system. The Resource Rating is used for this and it identifies how valuable the system's resources are. It includes everything from the quality of the resources and the ease with which they can be exploited, to the habitability of the various planets and moons

within the system and the ease of colonization. The RR represents how easily the system can be exploited, and the profits received once this is done. Resource Ratings range from 2 (poor) to 5 (rich). The RR is used when calculating **Economic Growth** (see economics).

To determine the RR an 'average die' should be used. This is a six sided die with the '1' changed to a '3' and the '6' changed to a '4' resulting in a die marked 2-3-3-4-4-5. This causes the die to give an average result when rolled and makes poor and rich systems rarer than average ones.

# Economics

All economic transactions in the game are made using the generic term "MegaCredits" (abbreviated "MCr") which represents the standard economic unit. All monetary and non-monetary resources are simplified into megacredits, which can then be spent on economic investment, infrastructure, or military expenditures.

Representing interstellar economics and commerce by using a handful of simple rules results in a vast generalization of the complexities of any economic system. At this level, even government policies would have a limited impact since these economic systems are so big and have so many competing elements. In fact, these rules should be treated as the attempts of governments to influence economics, rather than directly control them.

## Income

Every turn, every system controlled by a Star Empire generates income equal to its Current System Value. These amounts are added together, and this total is the gross income for the Star Empire for the current turn. Adding this income to any money left over from previous turns, plus any profits from trade gives this turn's total available MCr. This money is treated as a central pool that can be spent on items anywhere in the empire. Once all investments are made, expenses covered and purchases paid for, any MCr left over may be saved for future use.

## Economic Growth

The economy of any system that isn't already at its Maximum System Value will grow if you invest in it. This is the most common way of increasing a system's Current System Value

and the easiest way for an empire to grow. The maximum level of investment allowed for each system per turn is 10% of the system's income for that turn, with any fractions rounded down. The basic growth rate is 10% of the points invested. Next turn, the system's CSV will grow by this amount times its Resource Rating. This growth is also rounded down if the final total contains a fraction.

- *For example - in a system with a CSV of 50 and a RR of 4, a player might invest 5 MCr (the maximum allowed, 10% of 50) in economic growth. The turn after investing, the system's CSV will have increased by 10% of the points spent in investing x its RR (10% of  $5 \times 4 = 2$ ). Its CSV would now be 52.*

Economic Growth in a system is no longer possible once the system's CSV grows to equal its MSV. If the system's MSV increases due to a Tech Level increase, growth becomes possible again.

## Colonization

Another way for a civilization to expand is via colonization. This is the permanent transfer of resources from one system to another, and is done in a fashion similar to economic growth. It is more expensive to colonize from one star system to another, and to represent this, the growth in the receiving system decreases to only 5% of the points invested. Otherwise the calculations are identical to Economic Growth.

- *For example - if one system sends 5 points to a neighbouring system with a RR of 4, the second system's CSV grows by 1 point for the next turn. (5% of  $5 \times 4 = 1$ ).*



The MCr invested by a system in colonizing another must come from its own total available for Economic Growth. If all of these MCr are spent on its own growth, then there is nothing left for colonization.

The maximum distance (in jumps or hexes) one system may colonize another is equal to the civilization's **Civilian Infrastructure Range**.

## Civilian Infrastructure Range

This is a term representing the development and expansion of civilian ship traffic within an empire, and represents the speed and range of the empire's civilian ships. This Civilian Infrastructure Range determines how far systems can be from each other (in jumps or hexes) and still be considered interconnected. This rating represents the empire's internal reach, and limits trade, supply and colonization efforts. It is determined by the empire's Tech Level. In an FTL campaign it is equal to double the empire's Tech Level, in a Jump Route campaign it is equal to half the empire's Tech Level (rounded up).

- *For example - in a jumproute campaign, if a star empire has a Tech level of 4, it will have a Civilian Infrastructure Range of 2 and all systems within two jumps of each other are considered interconnected for purposes of trade or colonization and ships within 2 jumps of a colonized system are considered in supply.*

## Trade

The star systems within an empire may invest up to 10% of their income per turn in trade with each other.

To be eligible the two systems must be within the empire's Civilian Infrastructure Range of each other. The amount of investment applied to this trade cannot exceed the amount allowed to the smaller system. A "web" of eligible systems can be formed, as long as each system connects with at least one other system in the chain. In this case, no system within such a web may contribute more than 50% of the total MCr invested.

Income received from trade is equal to the original investment plus 20% profit, and is collected the following turn. Fractions of a MCr are rounded down.

- *For example - Star system A has a CSV of 100, and thus can trade up to 10 MCr (100x10%). Star system B has a CSV of 50, and thus can trade up to 5 MCr (50x10%). The maximum investment that can be applied by each of these two star systems is limited by the smaller one (system B cannot handle more than 5 MCr of trade). This means that the most both star system A and B can invest in their trade may not exceed 5 MCr each.*
- *If these star systems were part of a web that included star system C (with a CSV of 30), star system A's investment could increase to 8 MCr (50% of the total investment), B's would remain at 5, and star system C would contribute 3 (30x10%). System A would be trading 5 MCr with system B and 3 MCr with system C. Next turn's income would include Trade income of 19 MCr (16 + 20% of 16 rounded down).*

## Maintenance and Supply

A maintenance fee of 10% must be paid every turn on the total cost of all ships, stations and installations. Failure to pay this fee results in the immediate removal of any items not maintained.

To be maintained normally, all ships, stations and installations must also be in supply. They are considered to be in supply if they are within the empire's Civilian Infrastructure Range of a self-sustaining colonized system or supply base. Any system with a CSV of 20 or more is considered self-sustaining and may be used as an unlimited supply source for ship maintenance. If such a colony site does not exist, a military supply base may be constructed in any system within the empire's Civilian Infrastructure Range at a cost of 50 pts. This supply base may act as an unlimited source of supply and extends

the Civilian Infrastructure in the same way as a colony site.

For a ship out of supply due to being too far from a supply base there is a maintenance penalty applied of an additional 10% of its original cost (effectively doubling the maintenance). For a ship cut off from supply due to intervening enemy fleets or enemy controlled systems this 10% per turn becomes cumulative. The maintenance cost of a ship that is out of supply for this reason would be 20% of its cost (10%+10%) on the first turn. If it is still out of supply next turn, its maintenance increases to 30% (10%+20%). This increase continues each consecutive turn out of supply until the ship is returned to supply or is removed.



# Construction

## Construction Basics

Construction costs must be paid up front. The total construction of all ships, stations and installations being built within a system at the same time cannot exceed the CSV generated by the system as this rating represents the available resources. For this reason, ships may be built over a period of several turns.

- *For example, a ship costing 30 points being built in a system with a CSV of 10 would take 3 turns to complete.*

Ships and Stations may be built in one of two ways, in orbit around a planet, or in a shipyard. Building them in a shipyard is cheaper and quicker, but ships are limited by the shipyard's size. Building them in orbit costs more and takes longer, but has no number or size limits other than the CSV.

## Engineering Diagrams

Before any ship or station can be built, the engineering diagrams for it must exist. Creating these diagrams represents the time needed to develop the ship/station design and include any prototyping required. These diagrams take 1 turn to complete, cost the same as the ship or station being designed and consist of whatever the ship/station contains. Essentially, they're the Ship Displays from the ASFoS combat rules.

## Shipyards

A shipyard is an enormous area of interconnected construction platforms, storage docks and centralized control centers, in orbit, dedicated to building or repairing starships and space stations. The smallest ones cost 25 MCr and may construct (or repair) up to 25 MCr worth of work per turn. Larger ones may be built and, depending on size, they will cost and be able to handle some multiple of the smaller ones. For example, a double size shipyard (Shipyard2) would cost 50 MCr and could handle 50 MCr of construction or repair work per turn. These larger shipyards can be built as larger shipyards, or smaller ones may be added to when additional construction capacity is required.

- *For example - a system with a shipyard and a CSV of 44 would be limited to 25 points of construction within the shipyard since this is all the shipyard can handle. The same system with 2 shipyards (Shipyard2) could handle the entire 44 MCr (and in fact have 6 MCr of construction capacity left over that can't be used due to the CSV limit).*

The cost to build a ship in a shipyard is simply the ship's cost as determined by the Engineering Diagrams.

## Orbital Construction

Ship construction can occur without the aid of a shipyard. Constructing ships or stations in orbit is done exactly the same as in a shipyard, except that the construction is not limited by the shipyard size (since there isn't one). The cost increases by 50% due to the lack of construction facilities and this increase in cost may result in an increase in construction time as well. Orbital construction is still limited by the system resources (CSV) available.

- *For example – building a 20 point ship in a system with a CSV of 25 and a shipyard would require 1 turn, but building it in a system without a shipyard would cost 30 points and require 2 turns.*

## Repairs & Refits

Ships and stations may be repaired anywhere they can be built.

To repair damage on a ship, the cost of that damage must be determined first. For ASFoS, take the average of weapon and hull hits (round down) and divide it by the mass of the ship. Multiply this fraction by the ship's cost. This is how much it will cost to repair the ship, and this cost determines how long the repairs will take (as in the Construction rules), except that repairs to a ship are accomplished at double the build speed. Cost and time penalties for work done outside a shipyard are in effect as well.

A ship may be refitted when a higher tech system becomes available. However the mass allocated to each system may not change, thus if a ship had 2.7 mass allocated to its primaries and 1 mass allocated to a mass driver, when it upgrades to the next tech level in these systems the mass used may not be changed. Refits must be performed in a Shipyard and occur at the same speed as repairs. The cost of a refit is equal to the cost of the systems being upgraded.



# Movement

All FTL movement in the campaign is either done via faster than light capable engines or through the use of jumproutes. These two types of FTL travel should be mutually exclusive, one or the other is chosen as the method for FTL when the campaign is first designed.

## FTL Engines

Movement between star systems is done via the use of Warp Engines, engines capable of travelling faster than light. This movement is recorded on the map in hexes/squares/inches per turn (depending on the type of map). Warp Engines are capable of different levels of speed depending on their rating. FTL and tactical movement rates are both determined by the same engine rating.

The maximum a ship may move per turn is determined by its speed according to its engine rating times 6.

- *For example - a ship with an engine rating of 2 would move 12 hexes per turn.*

## Jump Routes

Movement between star systems is done via the use of naturally occurring wormholes, also known as jump routes, which connect the various star systems together into a web like network. Ships constructed with Jump Engines may travel down these connections, effectively jumping from one star system to another. The time required to travel down these jump routes is infinitesimally small compared to the distances involved, therefore the limiting factor in interstellar travel is a ship's sublight speed and the time required to travel across a star system from

one jump route to the next one, or inwards to the planets within the system.

This means a ship's strategic movement rate is based on the engine rating given to it in the ASFoS construction rules. A ship may make two jumps per engine point per turn.

## Exploration

Before a newly discovered system can be colonized, it must first be surveyed. This is how its BSV and RR are determined. How quickly a ship or group of ships can survey a system depends on their engine ratings and their civilization's Tech Level. This Tech Level times 10 as a percentage (ie: TL 4 = 40%) is the ship's Surveying Percentage. This percentage times the ship's engine rating is how much of the system a ship can survey per turn. The percentages of all ships surveying are added together, and when the total equals 100% the system is surveyed and the BSV and RR are rolled for (or revealed). If a ship uses only part of a turn surveying, its percentage surveyed decreases by the same amount. Surveying Percentages are cumulative from turn to turn.

- *For example - 2 ships with a Tech Level of 4 and engine ratings of 2 are surveying a system. Ship 1 surveys for the entire turn resulting in 80% of the system being surveyed (40% x 2 x 1 turn). Ship 2 jumps in from another system and only surveys for 1/2 a turn resulting in another 40% of the system (40% x 2 x 1/2). The total equals or exceeds 100% (80% + 40% = 120%) so the system has been surveyed and the BSV and RR are revealed.*

If jump routes are the campaign's chosen

method of FTL travel, then to be used these jump routes must first be discovered and mapped. The controlling player decides which suspected jump route he is trying to discover and any ship in the system may attempt to map it. The chance of discovering it is equal to the ship's Surveying Percentage. This is assuming the ship spends the entire turn searching, when only part of a turn is used the chances decrease by the same percentage. Percentage dice are rolled (2d10s), and if the result is equal to or less than this calculated percentage then the wormhole is successfully mapped. Chances of finding and mapping wormholes are cumulative from turn to turn (add the previous turn's chances to the current turn's total). Multiple ships in the same system may work together to find the same

wormhole, or work separately to find different ones. Once found, the wormhole must be rolled for (unless the map has been pre-generated) and if the wormhole being searched for doesn't exist, (the d6 roll for the wormhole wasn't high enough) success results in discovering this fact instead.

- *For example - 2 ships with a Surveying Percentage of 40% each and spending 1/2 a turn searching, would have a 40% chance of discovering and mapping a wormhole ( $2 \times 40\% \times 1/2$ ), or 2 chances of 20% of discovering different wormholes.*



# Star System Control

Control of a star system begins with the empire that first colonized it, but afterwards is determined by diplomacy and the presence of military units. The last empire to have had starships in the system becomes the new controller of that system, unless the ships did not intend to take control of the system. A system with warring ships from more than one empire is controlled by neither side.