

QUADRANT ZERO

Power & The Pursuit of Peace in The Universe

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SECTION ONE : THE MEGAGAME

1.1 Introduction to the Game

This megagame is about interstellar politics set several hundred years in the future.

We aim to examine in detail about a year or so of political, economic and military activity as a variety of political groupings attempt to deal with each other during a period of – if not peace - at least the absence of war.

This megagame is very unusual in that it is not a ‘one off’ game.

The starting conditions have been set by the current position in a long-term and ongoing political/strategic play by email campaign called *Humanity Will Prevail*, set in the persistent SF gaming environment known as (admittedly unimaginatively) “The Universe”.

All the actions by players in the megagame will count as part of the main game’s continuity.

Once the megagame has finished, the permanent players in the ongoing campaign (who will be taking part as well) will have to live with the outcomes generated during the megagame. So, everything that happens in this game is ‘important’ in that it will have consequences far beyond they day of the game itself.

This will, I hope, add a bit of ‘realism’ and depth to both games and hopefully make the results even more exciting.

The other very important point to note is that ***this is also a role playing game.***

Players are specific individuals with named roles.

They are located in specific places on the map, and are only able to react to things that their character can be aware of.

Game Control will reward good role-playing in a variety of unspecified ways.

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Streatham 2005

Game Note:

There is a great deal more detailed background available from the game’s website:

www.the-universe.org.uk

This includes links to some of the major powers’ own websites (where they have them), as well as potted biographies of the key player characters (most of whom will be present in the game).

Feel free to browse the Universe website – you don’t *have* to look at it – all you need for the game is in this briefing and your national briefing - but it will help to acclimatise you to the game environment. Especially useful for newcomers is the *Encyclopaedia Universalis* section.

There is also a mailer covering the public political debates currently going on in Quadrant Zero – if you’d like to follow discussion in the run up to the Megagame, you can join the mailer by sending an email with the word **subscribe** in the subject line to:

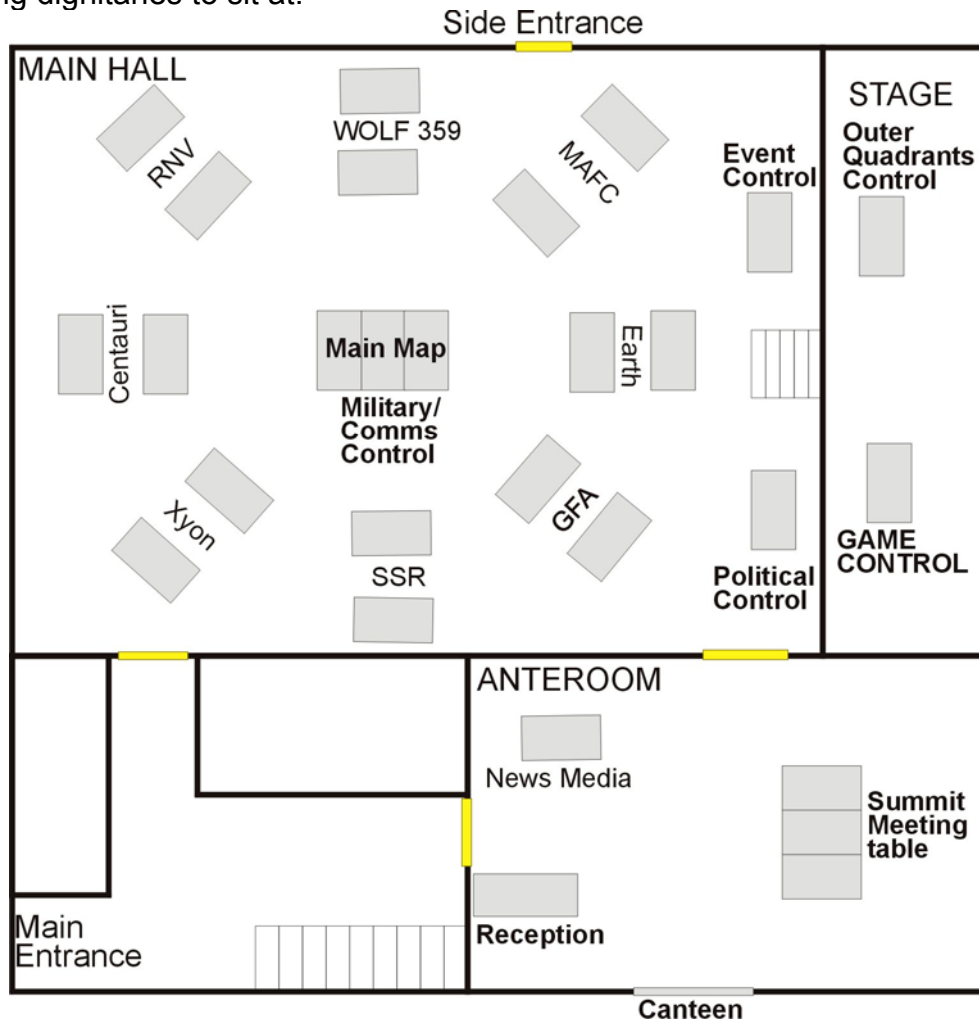
berswar@the-universe.org.uk

But be warned – the mailer is pretty active and you can expect to get a lot of mail as a result.

1.2 Game Layout

The game is laid out mainly in a single hall, with a master map of Quadrant Zero visible to all. This map will show main military deployments, and may show other key information – such as the location of VIPs. Player teams are required to keep the map up to date themselves, under the watchful eye of Game Control.

Each team will have a couple of tables, one for its ‘Cabinet Room’, and one for visiting dignitaries to sit at.



It may be possible for Game Control to organise ‘break-out space’ for unscheduled summit meetings – though, sadly, we will be unable to provide a chocolate mousse Jacuzzi for the purpose.

Interstellar movement and communication times are limited by the technology available. It is therefore not possible for players to have an interstellar ‘conversation’ – as if they were on the telephone. For the megagame we have simplified the rather complex problems of interstellar communication (see later) but in short, **players may not move about freely in the hall** (except, obviously, to meet the call of nature and to get food).

There are a few rules of etiquette in dealing with other teams, and you must bear these in mind:

- a. A team's table and the area around it must be thought of as private. Visitors (other than Control) should approach and ask permission to visit. If the permission is not granted they must go away.
- b. When approaching other teams - whether or not it is around their table - you must announce the capacity in which you are speaking.

1.3 Equipment Needed

You will need lots of paper and pens. There will be a lot of writing in this game. You may find it helpful to bring carbon paper as well – you will quickly find that keeping a copy of the messages you send is indispensable.

Whilst the game will function perfectly well using paper and pen, many existing players use spreadsheets to manage things like the economy etc. It is recommended that, if possible, there is at least one laptop per main team. If a team cannot manage that, let Jim know in advance and we'll see if he can arrange a loan for the day.

Each team will be supplied with laminated quadrant maps. You might like to bring *soluble* map pens or chinagraph pencils to write on them.

1.4 Information Flow

Given the fairly long time slice of each turn quite a bit of information is freely available in this game – more than might be the case in other games. As mentioned above, the main umpire map is open to view; but also information such as building ships, national income, the economic development of colonies and the results of negotiations and treaties will be available to all.

It is a built-in assumption that each power's intelligence services are working flat out all the time to watch what the others are doing. So, for all practical game purposes, there are very few things that can be kept hidden for long.

The News Media will be producing news bulletins during the day. Whether this is in the form of a news-sheet or a broadcast will depend on what equipment we have available on the day.

On the economic side, teams are responsible for their own economic record keeping, and Control has the right of access to the records should they feel the need to check up on you. The penalties for 'errors' in your national balance sheets are arbitrary and will be unfair.

Because this part of an on-going game which will continue after the megagame has finished it is vitally important to keep a record of what you did – your records are therefore vital '*historical documents*'.

Treaties must be kept – key messages, notes and reports must be kept and will be collected at the end of the day.

1.5 Political/Military Player Roles

Most teams will have the following main player roles; the exact way in which this works will vary slightly from polity to polity – so these are guidelines – for more detail see your individual National Briefing booklet.

Head of State: The exact nature of a head of state will vary with the type of government. It is an important role, in that they are the constitutional ruler. In a Constitutional Monarchy such as the Wolfers or the Earth Empire, they act as a force for continuity and have considerable influence, if little actual power. In some cases, the Head of State might not be played at all, but may be represented by Game Control.

In a Republic (such as the GFA), the President is the Head of State and usually has considerable executive powers, and is sometimes assisted by a Head of Government.

Player Function: Varies according to the type of government and the personality of the player.

Head of Government: responsible for the overall direction of policy, and chairs the cabinet. In some polities, the Head of Government is also the Head of State (Such as in the Republic of New Venus)

Player Function: To co-ordinate the players actions and chair the Cabinet committee. Often has the final say in decision making for the team.

Treasury Minister: Keeps track of the finances of the state, and reports to the cabinet on the current financial state of the nation.

Player Function: Controls the finances, in conjunction with the rest of the cabinet.

Colonial Minister: Responsible for all activities, including trade, concerning the polity's own colonies in all quadrants and with non-played independent colonies in all quadrants.

Player Function: Issuing orders for expansion of colonial interest around the Universe, point of contact for dealing with issues arising in the outer colonial quadrants.

Minister of Defence: Responsible for the deployment and operations of the military to meet commitments. Make recommendations to the cabinet/ruler on the size and shape of the armed forces.

Player Function: Issuing orders for military deployment. In the absence of a Colonial Player, handles colonial matters. Note that this is not a fleet command role – the job of the MoD is to set defence policy and deployment of ships and experienced (NPC) fleet commanders as appropriate.

Foreign Minister: Responsible for all diplomacy with other played powers.

Player Function: Diplomatic representative on the Cabinet. Control of diplomatic representatives and emissary players. He can also act as an ambassador in his own right (see below).

Ambassadors and Emissaries: Carrying out diplomacy on the orders of the Cabinet and under the direction of the Head of the Foreign Office, and representing the interests of their nation abroad.

Player Function: Visiting other teams to carry out negotiations, carry ultimata, declarations etc.

1.6 Other Player Roles

Interstellar News Networks: A team of players will represent the news media in the game. A vital element of the game is the dissemination of important news, and the probing and questioning of both political and military players. All polities in this universe are, to some degree, democratic – and they have to take account of public opinion.

The media team will be the means by which the ‘public’ get to question the government. It is probably helpful to think of these in terms of *Newsnight*, *The Today Programme*, CNN or *Channel 4 News* – i.e. challenging and incisive reporting, not ‘*shock, horror*’ tabloid reporting.

The INN will be asking a lot of awkward and challenging questions.

Specialists: There are some non-governmental individuals who have a key part to play in the political life of the Universe. These might be brilliant scientists, famous explorers, media personalities or master criminals. There will be roles for a limited number of these types of characters (if we have enough players).

1.7 Game Control

There will be a fairly small Control Team, who will have very specific duties. Most of the game policing is done by the players themselves – ensuring that correct movement and communications limits are adhered to etc.

Game Control: Overall control of everything and the last court of appeal on the game.

Outer Quadrants Control: Responsible for reporting what is happening in the outer colonial quadrants. Responding to events in the outer quadrants is often the most challenging thing player will have to do, because of the time delays involved.

Military / Communications Control: Responsible for ensuring that the military are declaring their fleets properly, and that the fleet locations are accurately shown on the master map.

They are also responsible for ensuring messages are delayed by the correct amount of time, and acting as ‘postman’ to some degree (though players will be expected to help out with this too).

Event Control: They are the source of news items and other significant events that crop up every turn in the game. Much of what the player teams will be doing is responding appropriately, on a political and military level to emerging events.

Political Control: Their role is to circulate among the polities and help out teams that may be having trouble organising themselves or have reached an impasse. They will act as if they were the polity's civil service or governmental advisors and do what they can to help, without solving the players' problems for them, of course.

General Principles

Players are expected to run themselves to a large degree – there is very little International Law in the Universe, except that which players develop.

The few exceptions are the Stickney Treaty outlawing the development of sentient Artificial Intelligence and the Geneva Convention outlawing Mass Driving.

Resolving inter-polity disputes, reaching agreements etc are matters for the players. The Control team are there to feed new information into the story and to adjudicate on things not covered by the game rules.

In general, requests for information / decisions from a member of the Control Team should be in writing – and they will reply in writing.

This is essential because of the on-going nature of the game – so that we can look back at what was said and decided during the day.

1.8 Negotiations, Treaties And Summits

Negotiations

Player powers may at any time meet and negotiate to resolve current issues.

Treaties

Given that there will probably not be the time to negotiate subtle and complex treaties during the game, all teams will use a set of standard treaties. Political Control will provide proforma treaties of each type.

These must be agreed and signed at the appropriate level.

Players may define the duration of the treaty, and the default is five years if no period is specified.

Players should try not to word their own treaties (unless approved by Political Control), this will only lead to hastily drafted over-complicated and confusing treaties which will prove problematic later on.

Standard treaty types.

| | |
|---|--|
| Non Aggression Treaty | The signatories agree not to attack each other for the duration of the treaty. A legitimate casus belli will negate the terms of the treaty. |
| Recognition of A Claim | The signatories agree to recognise one or more claims to a specified world, and by implication agree not to interfere in the development of that world. |
| Recognition of A Sphere of Influence | The signatories agree that one signatory has a legitimate claim to a sphere of interest (a list of worlds). For this to be binding, the signatories MUST be at least the majority of polities with control of worlds bordering on the proposed sphere of influence |
| Defensive Alliance | The signatories agree that an attack on one (either by a named power or any powers) constitutes an attack on all, |

| | |
|-----------------------------|--|
| | and that they will declare war on the aggressor in the event of such an attack. |
| Offensive Alliance | The signatories agree that they will declare war on a named party at an agreed time etc. This still requires a <i>casus belli</i> for at least one party. |
| Treaty of Neutrality | This is an agreement between two parties that in the event of a war with a specified third party, they will remain neutral with respect to that war. |
| Treaty of Friendship | This establishes particularly friendly relations between the signatories, and may be a precursor to more binding treaties. In the event of an unwitting <i>casus belli</i> arising between the signatories, this makes smoothing it over easier. |

Treaties and Secrecy

Under normal circumstances all treaties are open.

In certain special cases, states may enter into secret treaties.

In this game the only case for a secret treaty is the Offensive Alliance.

All treaties **MUST** be notified to Political Control and all non-secret treaties must also be notified to the News Media Team.

Summits

Strictly speaking a summit meeting is a meeting of heads of state, though in the Universe, it sometimes also means a meeting of senior ambassadors with plenipotentiary powers.

Under the Treaty of Old London, all interstellar powers have agreed to meet periodically for an interstellar summit. There will be two such scheduled summits during this megagame.

Additional summit meetings between heads of state may very well be organised as circumstances dictate during the game. Players wishing to do this should consult with Political Control.

Casus Belli

It is expected that in the unlikely event of military conflict between major powers that some sort of *casus belli* will exist. This will need to be more than 'he looked at me in a funny way'. Your populations, your political parties, your business community, will all wish to be reassured that military action is a last resort and is utterly justified. And before you try it, cobbling together a faked up report about an imagined enemy threat is also unlikely to wash with the public - this isn't the 21st century – blatant attempts to fool people generally have serious political consequences. The one sure-fire *casus belli* is the development of a sentient artificial intelligence.

Ultimately, Political Control will advise you on whether you have a legitimate *casus belli*.

1.9 The Game Turn Sequence

Game Turns

There are two sorts of game turn, Long Turns (1 hour) and Normal Turns (30 minutes).

If the game moves at a greater speed, Game Control may declare a Turn End early, to allow for more game turns in the day. However, the target of 1 year (8 turns) in the day must be stuck to, so turns will not be lengthened under any circumstances.

Long Turns are to allow time for Treaty of Old London Summit meetings. These should be straightforward, since polities usually stitch up the agreements ahead of time and the summit is often just a matter of agreeing on the joint communiqué, and having a big party.

The other use for a Long Turn is to assimilate the Annual Economic Report that is due at the end of Turn 36. This report is a vital document because it tells polities how many resources they have for the forthcoming year. In practice much of a government's resources are already committed (mostly on the fleet and local government costs) – but there are usually some important investment and resource transfer issues to discuss. Especially if the economy does not do well.

Time

Each turn represents 50 days. Because of time limitations Game Control will move the game on rigorously, if you are not ready for a turn then you miss it. Similarly negotiations and other activities should be carried out simultaneously with the rest of the work of running your polity. Because this megagame is a continuation of a larger game, it does not start on 'Turn 1', but on Turn 32.

Turn Sequence

| Turn | Stardate | Time | Period | Activity |
|------|--------------|-----------|--------|---|
| 32 | 3203.150-199 | 1030-1130 | 1 hr | First turn - familiarisation |
| 33 | 3203.200-249 | 1130-1230 | 1 hr | Summit Meeting - Agenda pre-determined. |
| 34 | 3203.250-299 | 1230-1300 | 30 min | Ordinary game turn |
| 35 | 3203.300-349 | 1300-1330 | 30 min | Ordinary game turn |
| 36 | 3203.350-399 | 1330-1400 | 30 min | Ordinary game turn |
| 37 | 3204.001-049 | 1400-1500 | 1 hr | New Year Economic Update |
| 38 | 3204.050-099 | 1500-1600 | 1 hr | Summit Meeting |
| 39 | 3204.100-149 | 1600-1630 | 30 min | Ordinary game turn |

Sequence Within A Game Turn

Within each game turn, we will be using the following turn sequence:

1. Player Movement Phase – players moving to another location in quadrant zero must do so within the first five minutes or so of the turn.

Once you have arrived at where you plan to be that turn, ***you must remain there for the whole turn*** (the only exception is if you wish to make a move of up to 10 parsecs, in which case you can make **one** further move only)

2. Write outgoing messages. You have until halfway through the turn to write any messages you wish to write to other people anywhere, either in Quadrant Zero or one of the outer colonial quadrants. Stack these up in the local 'out tray'. Make sure they are properly addressed.

Game Note: to help with the game flow, if we have time we might include a second exchange of intra-quadrant communications per turn, particularly during Long Turns.

3. Receive incoming messages. You cannot receive messages until you have completed the outgoing message phase. These will be delivered to you at

your location. Reading and considering incoming messages takes the remainder of the turn.

You can, of course, communicate freely with anyone co-located with you.

Communications to and from the outer colonial quadrants will be subject to further delay of a turn.

SECTION TWO : BACKGROUND

2.1 Society - What is it Like?

In general, human society is very recognisable. Human attitudes are not much altered from the 21st Century - humankind still competes, double-deals, acts bravely and honourably, or for greedy and base motives.

Most of the differences that have arisen over the last few hundred years arise out of the factors described below. These apply to human society in general throughout the Universe. Within this, there are very wide local variations of attitude and practice - especially in the outer colonies.

There are no concepts such as the fictional 'Prime Directive'. All polities will interfere with another culture or society so long as they think there is some benefit from it, and that they can get away with it.

There is a tiny body of interstellar law; based on bilateral and multilateral treaties - and for the most part the main polities adhere to this - at least in public.

2.2 The Polities

The first important thing to note about the player teams is that everyone is human (see below - 'Aliens')

| Official name of the polity | 'known as..' | 'National Characteristics' (2) | Size & power |
|---|--------------|---|--------------|
| Greater Federation of Asteel (GFA) | Esteelers | Democratic, freedom-loving, a bit inefficient. Politically and socially bit like present-day America | Major |
| Mars Association of Free Colonies (MAFC) | Martians | Independently-minded, loose association of freedom-loving colonies. Famous for being relaxed (like Australians) and for having very efficient military. | Major |
| The Centauri Conglomerate (CC) | Centauri | Heavily economically based, capitalist system believing in the primacy of market forces. Profit-motive is strong. Believers in very small government. (eg even its star-fleets are sub-contracted). Have a pathological hatred of robots. | Minor |
| The Earth Empire (1) (EE) | Earthers | The oldest and strongest polity. Famous for its traditions and alleged arrogance (think 19 th century British Empire). | Major |
| The Republic of New Venus (RNV) | Venerians | Young and some say aggressive polity. Famous for its high degree of centralised control (think - Soviet Union). | Major |
| The Sirian Socialist Republic (SSR) | Sirians | High bureaucratic and internally politicised polity. Makes very extensive use of robots (to whom it has given limited legal rights). | Minor |
| The Union of Xyon (UoX) | Xyonists | Small, strongly commercial and trade based polity. Has strong links with the GFA. Famous for its intelligence services. | Minor |

| Official name of the polity | 'known as..' | 'National Characteristics' (2) | Size & power |
|---|--------------|--|--------------|
| The Wolf359 Commonwealth (Wolf) | Wolfers | An older polity with long traditions. Fairly close-knit and insular. Has an influential Royal Family. (Think – present day Britain). | Minor |
| The Mald Democratic Foundation (MDF) | Maldenites | A very old polity that is based around a number of huge research foundations and universities. Somewhat aloof and a little odd. | Minor |
| League of Non-Aligned Worlds (LONAW) | The League | A recently formed loose political alliance. Non-aligned worlds feel that the 'big boys' tend to ignore their interests and bully them. This grouping seeks to provide a voice for the independent worlds in the discussions of the major powers. | Minor |

Notes

- (1) Constitutionally the Earth Empire is actually called 'The Solar Republic' – but this term is practically never used.
(2) These are grossly over-simplified stereotypes – the actual character of a polity of billions of humans is obviously much more complex than that.

2.3 Astrography and Astropolitics

Human Space is about 400 parsecs across and is divided up into nine administrative zones, called (somewhat inaccurately) 'Quadrants'.

The eponymous Quadrant Zero is the central quadrant, wherein lies Earth – the home of humanity and all the oldest colonised worlds, the Home Worlds.

Around Quadrant Zero are eight other quadrants, numbered 1 to 8. These contain the colonial worlds – frontier worlds that are, on the whole, much less developed than those of Quadrant Zero.

If it helps, think of them as 'wild west frontier' type worlds. Communication and travel times between the outer quadrants and Quadrant Zero are measured in months – so all polities with an interest in the outer quadrants maintain separate arms of government in each quadrant – headed by a Governor (or the equivalent). Each polity in each outer quadrant will have its own seat of government, its own fleet etc.

Of course, not all polities have interests in every outer quadrant.

There is often a tension between the Quadrant Governors and the Home Worlds, and, more importantly, it is the nature of conditions in the outer quadrants that local tensions flare up into military action or sometimes even war. In many cases these 'little wars' are over and resolved before the Home Worlds even hear about it. In other cases, the political fallout from such a conflict can spill over into Quadrant Zero.

Outside the outer quadrants are the 'Sectors'. These are pretty largely uninhabited, except Sectors AG, AH and AI which have a mere handful of independent colonised worlds.

The Universe - Administrative Boundaries

| | | | | |
|-----------|-----------------------|-----------------------|-----------------------|-----------|
| Sector AF | Sector BF | Sector CF | Sector DF | Sector EF |
| Sector AG | Quadrant Three | Quadrant Four | Quadrant Five | Sector EG |
| Sector AH | Quadrant Two | Quadrant Zero | Quadrant Six | Sector EH |
| Sector AI | Quadrant One | Quadrant Eight | Quadrant Seven | Sector EI |
| Sector AJ | Sector BJ | Sector CJ | Sector DJ | Sector EJ |

| Population Density | | | |
|--------------------|--------|-----|------|
| None | Sparse | Low | High |

2.4 The Exterminator War

The big event of the last seven years was the arrival of the Exterminators. To cut a long and horrific story short, a fleet of robot-controlled super battleships turned up in Quadrants 5, 6 and 7 and proceeded to devastate colony worlds. They were dubbed '**The Exterminators**'.

The full death toll may never be known, but human losses approaching half a billion have been suggested.

Not surprisingly, humanity fought back and after several years of warfare the attacks have ceased and it appears the Exterminator assault has been stopped.

Their exact origins and purpose have not yet been determined – and although, at the start of our megagame the Exterminator menace still has not returned – the shadow of a possible 'second wave' looms over all humanity's thinking.

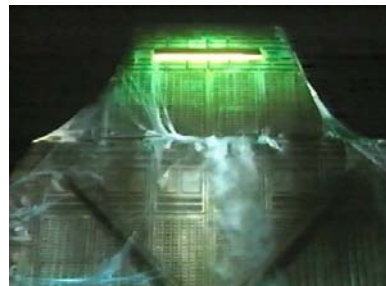
Currently, there is a combined human command structure for fighting the Exterminators, set up by the Treaty of Old London. Under this treaty, a Supreme Human Commander was appointed (currently Admiral Hojo, of Mars) – who has the dubious pleasure of coordinating the fleets of all humanity in preparing for another Exterminator onslaught (or any other threat to humanity for that matter). Thai-Sho (Admiral) Hojo has to tread a fine line between the



various political demands of the Treaty Powers, and the inevitable manoeuvring that goes with that.

2.5 Artificial Intelligence

The other major perceived threat to humanity is from home-grown artificial intelligences. The history of the last 300 years of so is littered with failed and disastrous attempts to construct a benign sentient AI. The earliest of these attempts led to huge loss of life and the destruction of the colony of Gustav and the fledgling Martian colony back in 2900 (some readers may recall the Battle of Stickney at the megagame, 'Revenge of the Robots in 2001).



The outcome of that conflict was the Stickney Treaty, outlawing forever the development and construction of Sentient Artificial Intelligence Devices. This has not prevented criminals and madmen from attempting to build (or building) sentient AI from time to time. These attempts always end badly. Non-sentient AI is widely used however, in ship's computers, planetary administration and even domestic robots of various types. The use of robots is widespread, except where there remains cultural resistance to their use (such as on Martian and Centauri worlds). Some polities embrace the robot as an ally (the Sirians). Recently the issue of dangerous AI came to a head once again last year, when a rogue and illegal AI attempted to take control of an entire colonial quadrant (Quadrant Three). A combined punitive expedition under the Earther Admiral Burwisher managed to eliminate the treat, but not without considerable loss of human life in the process. The impact of this take-over attempt is still being felt in that quadrant.

2.6 Chronology of the Last 100 Years

3101 Cyborg Rebellion on Samhain (Q8) - major attempt of a large group of cyborg humans to overthrow the Sirian government on that world and gain independence. The SSR was forced to ask for assistance from the neighbouring Martians. The rebellion was eventually squashed, and many of the insurgents were shipped out and exiled to a distant subsistence colonies in another quadrant.

Colli and Gum (Q2) vote to join the Union of Xyon.

3103 Quoheleth and Hobbes (both Q1) vote to join the Union of Xyon.

3121-3124 Ritchie Civil War (Q4).

3124 Drazi (Q5) votes to join the Union of Xyon.

3125 Ritchie (Q4) votes to join Union of Xyon after UoX forces assist in bring a peaceful settlement to the Ritchie Civil War

3141 First manned survey, the ESS Odyssey sets off to the centre of the galaxy, sponsored and launched by the Imperial Astrographer's Institute - a 60-year round trip.

3150 Wolfers colonise Tigris (Q2)



Victim of the Organian Atrocity of 3174

3151 Akhenaton (Q2) joins the Union of Xyon

3155 Moll and Scorcher (Q2) colonised by Wolfers

3170 Battle of Safeway Station. Earther forces retake control of a key orbital, initially captured by 'unofficial' Venerian forces, at The Long End (Q1).

3174 The Organian Atrocity - a master criminal scientist terrorised the planet and released a horrific mutagenetic virus into the atmosphere (the 'Wild Card Virus') leaving 1.3 million dead or horribly mutated.

Wolfer King Marx I dies aged 119. King Stabilo I ascends throne.

3182 Wolfer King Stabilo I dies aged 103. King Stabilo II ascends throne.

3186 First data from the centre of the galaxy received from the manned probe *Odyssey*. Remarkable images of the Core Stars syndicated throughout human space.

3196 The Battle of Paquito and the official start of the Exterminator War.

3197 Major space battles against the Exterminators at Yendor, Trucker, French, Adobe, Doggie, Baldar, Dyme, Ultra, Dubai and Asstek.

V1, V2, Cone and Gagger (Q7) all join Union of Xyon.

Romulus (Q3) votes to join Union of Xyon after Xyonist forces conduct peacemaking operations there.

3198 Major space battles against the Exterminators at Senta, Winky, Doggie, L'Fayet, Flypaper and Dyme. A large Exterminator base was destroyed at Granyt.

First major large find of 'Forerunner' artefacts discovered at TUSKAN in Q7.

This find confirmed a great deal of speculation about the only sentient alien species known to have existed in the volume of space occupied by humanity.

3199 Major space battles against Exterminators at Begin and Peroxide. An illegal AI was destroyed on Over (Q5).

3200 Two gigantic Exterminator bases located, one in Q5 (Z'ha'Dum) and one in Q6 (Red Spot) - both bases destroyed by huge combined Human fleets.

Treaty of Old London agreed setting out the creation of a Supreme Human Commander (Thai-Sho Musashi) and the commitment of fleets to a new joint command to fight the Exterminators. Battle of Tuskan where 16 Exterminator Super Battleships were destroyed by a combined human fleet under Earther Admiral Tryon. Existence of a forerunner AI finally revealed by Earth Government. Forerunner AI destroyed.

3201 ESS *Odyssey* returned from the centre of the Galaxy. Evidence of another sentient civilisation in the Galaxy confirmed.

Thai-Sho Musashi missing believed dead in hyperspace accident. Thai-Sho Hojo appointed SHC.



3202 The Avalon Incident (Q1). Holm Incident (Q1) result of a local 'misunderstanding between an Earth/GFA Fleet and Venerian fleet. The ULTRON Crisis - a rogue AI took control of a number of human warships in Q3 and attempted to take over control of the quadrant. It was defeated by a combined punitive expedition. Formation of the Interstellar Forerunner Foundation – for the first time pooling all Forerunner research made by all polities under one organisation. Operation *Boldy Go* launched on it's 4.5 year mission to visit the location of the putative alien civilisation.

2.7 New Technology

There have been no fundamentally new technologies for several hundred years. Even the refinements of existing technology have stopped. The weapons, ships, consumer goods, transportation, communication, entertainment and domestic technologies are therefore stable. In this era it is a case of making best use of what is, rather than invent a better device.

Some technologies fall out of fashion, and then get 'rediscovered' - others are so common that nobody even thinks of them as technology (computers for example). Humanity - as always - is ingenious and cunning in re-using existing technology in imaginative ways. Particularly in weapons. For example, the technology to mass drive asteroids into planets has existed for centuries, but the practice was banned by international treaty, and nobody has done it for over a hundred years. All that was required when such a thing was needed to attack the Exterminators was to look up in the archives how to do it.

2.8 Computers

Computers are of very little importance. Nobody notices them. Everybody has a notebook, which contains as much information as is required on anything. Ancient concerns like processor speed, data storage, bandwidth etc are things of the past, and therefore unimportant. Nobody even talks about computers any more.

Things like computer viruses and operating systems that crash every day are almost legendary things of ancient history. Modern

Game Note: Why No New Technology?

It is a staple of SF political/military games that the various polities vie with each other in a technological arms race to get ever better starships, with weapons of ever more ravaging power etc. This cliché has its uses, but in my experience it tends to obscure the most important elements of good gaming – interaction and problem solving. If the solution to every problem is to invent a new and better gadget to solve that problem, where is the real creativity for players? And more importantly in a game which represents the entire economic and social aspects of human civilisation, can anyone realistically integrate the effects of continual new technologies on that society? Star Trek managed to get it badly wrong with 'transporters', 'replicators' and 'anti-gravity' – handy for solving TV show production problems, but their wider economic and social impact would be far huger than the show's writers could take account of. So, in the Universe, the focus is on what you do with what you have. That is not to say new technologies might not come along sometime – but they will be few and probably unexpected and unasked for. New technology is often driven by factors entirely outside the control of politicians (i.e. the players). For example no politician asked scientists to develop the Laser, it just happened – with massive impacts for society. And when in the 1980s a US President demanded a Wonder Weapon – nobody could get it to work, despite spending huge resources on it (without falsifying the test results anyway). So don't ask for a new wonder weapon, you might just get what you ask for!

systems are fundamentally virus-proof and 100% reliable (battle damage excepting).

"...we are, by any practical definition of the terms, fool-proof and incapable of error." - HAL9000

2.9 Aliens

In all the time of human expansion, there has been no example of sentient life forms on any of the human colony worlds or on worlds visited by humans. There is growing evidence of a dominant pre-human alien civilisation in the region, known as the Forerunners - but the evidence they left behind them is comparatively meagre (though growing). Most colonised worlds have indigenous animals - and these have a very wide diversity of form and function - so this sort of 'alien' exists in abundance. The vast majority of colonised worlds seem to be in the age of giant reptiles.

Every so often there are rumours, of course. Space is big and humanity spread quite thinly outside Quadrant Zero, so colonists report all manner of strange things - little grey aliens, 12 foot shape-changing lizard aliens, invisible killer aliens, fairy-folk, goblins, indestructible flying aliens, and acid-blooded killer aliens.

So far these accounts have not been independently verified. In the last year or so there have been the first indications of some primitive indigenous evolved sentient dinosaurs on a remote world - but this hardly constitutes an alien civilisation.

So - there are officially no aliens in the human Universe. Well - at least not until the Exterminators came.

Game Note: What - No Aliens?

The SF genre is full of alien 'races'. In the majority of cases (and especially on TV) they tend to be of the '*rubber-masked human*' kind. That is they exhibit only superficial differences and remain culturally and psychologically recognisably human. I won't discuss why writers seem unable to render truly 'alien' alien civilisations - but in this game it seemed just too much to expect human players to successfully role play an entire alien civilisation.

Humanity has vast diversity of thought, religion political structure and culture - it seems that they was already a rich source of diversity (and therefore conflict and competition) without having to invent entirely new species. The history of humankind is enough of an indication as to how this diversity would be very likely to continue into the future. So, no alien civilisations in The Universe - yet.

2.10 Faster Than Light Travel

The hyperspace drive (HSD) is the only means of practical interstellar travel. Put in layperson's terms the hyperspace field generator creates a bubble of normal space which conducts a phase transfer into a transdimensional state.

This is known, colloquially, but rather inaccurately, as '*entering hyperspace*'.

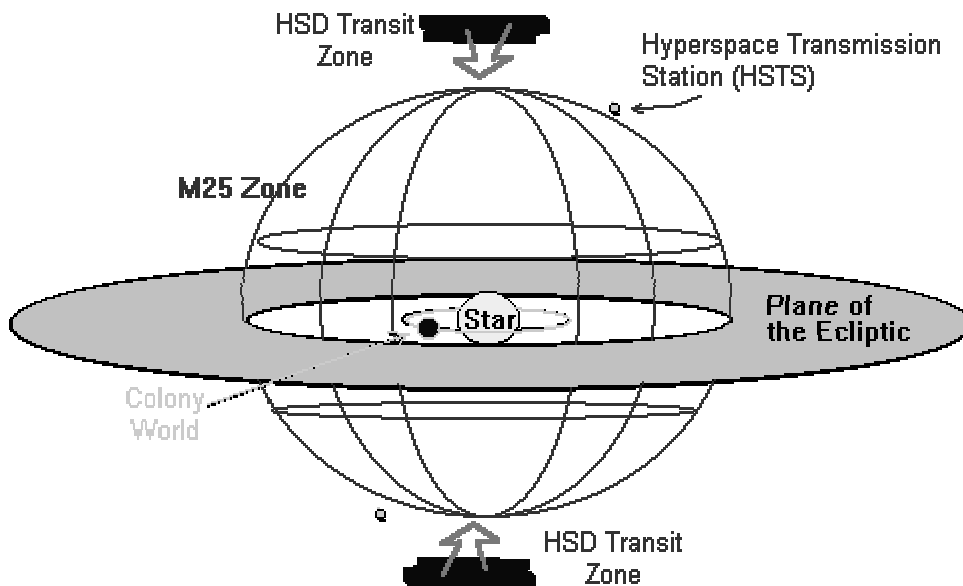
Once in hyperspace, the drive alters the 'shape' of the normal space bubble containing the ship, so that it alters its dimensional parameters over time. This is analogous to movement in normal space, but much faster. Within the bubble, the physical laws of normal space continue - meaning that a ship can continue to accelerate or decelerate whilst in hyperspace, and can exit hyperspace in any orientation relative to the start position. Whilst its mass, subjective time and speed are retained, vector can be altered as required on exit.

This technology has been developed to the maximum theoretical speed, which approximates to 1 parsec per day.

The M^{25} Limit: There is a limitation on the operation of the drive system, that arises from part of the mathematical theory underpinning the operation of the drive. The key physical constant is known, in the maths, as M^{25} - and the limitation imposed by this constant as the ' **M^{25} Limit**'. This presents an operational minimum distance from a large mass that the drive will work safely. Ships cannot operate their hyperspace drives within the M^{25} limit. Put simply, the M^{25} limit is directly proportional (within the relevant range) to the gravity (g) of the mass concerned – in effect the limit is the 'g' of an object expressed in Astronomical Units (AU).

For Example: The Sun (Sol) has a gravity of approximately 26g so the M^{25} limit for the Solar system is 26 AU. (an AU is approximately 150 million km) Any gravitational bodies, such as planets, have an M^{25} limit (though much smaller) - so Earth would have an M^{25} of 1 AU (but since it is well within the Sun's M^{25} , this hardly matters). Even asteroids with micro-gravities have small M^{25} limits - an asteroid with 0.001g would have an M^{25} of 150,000 km.

Slower Than Light Navigation: When moving through a system within the M^{25} limit - to avoid (or reduce) the chance of collision with debris or rocks, most transits into and out of hyperspace take place well outside the plane of the ecliptic (where most of the matter is to be found). Typically, the transits are at 90° to the plane of the ecliptic, either stellar 'north' or 'south'.



Once in system, movement is in normal space, the typical starship is capable of continual acceleration of around 1g – meaning they could transit from the M^{25} of the Solar System, to Earth in a little over 10 days

Interstellar Communication: Using the same technology, it is possible to modulate a micro-hyperspace packet, by using the hyperspace field generator that is part of every HSD. Each HS field generator has a unique hyperlinium vibration frequency (HVF). This means that messages can be sent '**to**' a specific recipient, provided their HVF is known. These packets can be sent at a speed of 2 parsecs a day, but can only be received by functioning HS field generators. For this reason, all developed star systems have one or more

Hyperspace Transmission Stations (HSTS) situated just outside the M^{25} limit of the system. They can then receive conventional microwave or laser communications from planets and ships within the M^{25} , and relay them via hyperspace to their destination worlds. The precise location of these small manned stations is often kept a secret, because of their vital strategic role.

Detection: Normally, the operation of an HSD is undetectable, and there is no way of finding out where a ship has gone, or in what direction, once it enters hyperspace.

There is also nothing about the creation of an HSD field that gives any indication of the likely final destination - so even if you actually saw a ship enter hyperspace, you wouldn't be able to tell where it was going.

2.11 Money

There is a system of monetary exchange. The Interstellar Monetary Unit (IMU - known colloquially as the 'credit') has been around from several hundred years.

In addition, some of the minor colony worlds have operated their own currencies - where they have not been able to trade sufficiently to attract banking services from one of the Big Seven interstellar clearing banks. Some nations do have internal currencies based on specific worlds - usually for historical reasons. Most famous is Earth's unwillingness to completely give up its ancient currency, the Dollar, and fully integrate with the IMU for domestic trading - arguing that such an integration would be giving up an important area of sovereignty.

Most monetary exchanges are electronic, though again, units of exchange exist that are not linked to the PlanetNet or StarNet universal banking systems do exist where technology is in short supply. Most common of these are handy portable **CashChips™** - used widely in the outer colonies as verifiable monetary exchange unit backed by IMUs.

2.12 Genetic Segregation

One of the common technologies of the Universe is the ability to genetically engineer the human form.

It is a matter of social fashion that these variations tend not to be too grotesque - those that can choose, i.e. the richer parts of society - choose offspring that are genetically perfect examples of humankind. The '*Perfects*' are healthy, strong, intelligent and good-looking (within small variations). As a result, *perfects* form virtually the totality of all the areas of responsibility and leadership. All the military are perfects, all government, industry and educationalists are perfects. *Perfects* form a large minority of the general population.

The remainder of the poorer part of the population tends to be made up of those with more natural genetic material. The *Naturals* are prone to the usual range of human abilities - the best can equal or even exceed the perfects, but might carry injurious recessive genes and are prone to illness and don't live as long - the majority are just not up to the standards of engineered perfection.

On new colonial worlds, there tends to be a higher proportion of naturals, though perfects (or the natural descendants of perfects) still tend to lead and take important jobs. The governmental personnel of imperial or colonial powers have very high proportions of perfects (usually virtually 100%).

Discrimination on the grounds of genetic makeup is not only legal, it is required in some cases - for example naturals are not normally allowed to serve in the military, police or on the judiciary. This discrimination is regarded as normal - in fact it is seen as reasonable - since unlike 'race' discrimination in ancient times on Earth - the discriminated group *is* actually inferior (rather than merely inferior by virtue of the dominant social power structures). Arguments that suggest that discrimination should end on the grounds that 'all humans are equal' fail in the light of verifiable biological fact.

The acceptance of the genetic status quo is so widespread that the subject is never even mentioned or considered by those in power - the naturals being, in effect, an invisible part of all human societies of the Universe. All players in this megagame are *Perfects*.

There are small groups of *natural* activists, some resorting to direct action at times - but they have so far failed to get widespread support, even among the natural population. Most well known of these groups is the feared *Democracy And Freedom Today* group - which has been responsible for seemingly random acts of terrorism and mayhem throughout human space for many years.

2.13 Cyborg Humans

Cyborging - or the ability to graft technological enhancements onto the human body has been around for some time. Humanity as a whole tends to prefer to be genetically perfect but human, rather than a mixture of human and machine (i.e. most people would rather have perfect eyesight than glasses).

It tends only to be the psychotic personality that chooses to, in effect, self-mutilate by adding cyborg components to their bodies.

That said - there are those who make the lifestyle choice to cyborg - even though it is more expensive and painful than gene engineering - akin to the 21st century fashion of body piercing.

It is also done by some naturals who wish to make a political point as well.

A drawback of the process is that the more cyborging that is done, the less human the cyborg becomes - cyborging has been shown to increase the incidence of psychotic behaviour.

Some worlds have made Cyborg operations illegal, due to the links between cyborgs and criminal activity. Other worlds have embraced cyborging as a political creed, though generally one wonders about the political and social stability of such a system.

2.14 'Races'

Humanity has no 'races'. There are many and diverse ethnic variations - some old some new. The majority of humanity in the universe is from old Earth Asian and Mongolian-Chinese stock, but the physical differences are not as easily defined as they were centuries ago due to various social upheavals and intercommunication. There are minor physical differences that have arisen as a result of inbreeding on long isolated subsistence colonies - but on the whole the very concept of race is missing since it proved too difficult to define in any rational way.

If humanity were to encounter any non-human sentient, they would, of course, not be referred to as 'alien races' since that would be a biologically meaningless term. The proper designation is alien *species*. (Unless, of course, you can

interbreed with them, in which case they would be, by definition, human and not alien).

2.15 Religion

As throughout it's existence Mankind has remained in need of mystical, spiritual or ethical guidance.

In the Universe, religions and non-religious ethical teachings continue to pervade every human society, wherever it is located..

The mix of faiths varies widely from world to world - some colonies were founded by specific religious groupings, some by breakaway offshoots of more established religions. Few worlds are mono-cultural though - even if tolerance is not absolutely universal.

Unfortunately there isn't room here to go into a detailed analysis of the teachings or the demographics of these various faiths.

SECTION 3: THE MAIN RULES

This is an extract of the main campaign rules that we are basing the game on. The full version can be found on the website.

Few of these rules will be needed in the megagame because they mostly relate to economics, which will only be a small part of the game play on the day of the megagame. So most players only need to use this section for reference.

3.1 Interstellar Economics

In order to keep the Universe easily manageable, all occupied star systems have been fitted into one of several generalised categories.

The only exceptions are Home Systems - which have their own unique characteristics.

In this system there is no 'money' as such. On the planetary level, the main concern is the capacity of the system's economy to support certain types of government controlled or sponsored activity.

**It is important to grasp this concept
– it isn't a familiar one for many players.**

Government activity represents a very small part of the planetary economy, and in the Universe, even the most directive governments have little or no control over the actions and economic decisions of the big trans-stellar corporations (which are largely out of the hands of players).

This has a knock-on effect that the interstellar economy can have an impact on the ability of governments to maintain their internal economy, and hence keep up their forces.

Economic down-turns tend not to affect Home Worlds as much as the colonies. This is reflected in this game by colonies (but not the Home Worlds) moving up and down in status - i.e. from Rich Colony to Above Average Colony.

This is worked out annually.

Since the players represent the various central governments, these rules will concentrate on the ability of those governments to utilise those parts of the economy over which they have some influence, and to spend the resources they receive in taxation.

So, the most important parameter that we will be working with is the **Support Value** (SV) which is defined as:

The contribution a system makes to the ability of the Government to operate its various activities.

Support Values can be pooled within a quadrant, but only 10% of a quadrant's SV can be passed to each adjacent quadrant. Since SV is a measure of economic capacity, it cannot be carried over from year to year.

The support value can be passed to another polity within the same quadrant, if this agreed by treaty.

The amount of SV generated depends on the category of system.

Game Note :
Annual Finances
 In the Quadrant Zero Megagame, the annual economic changes will have been pre-calculated to save time, and issued to teams ahead of the end of the year to give teams plenty of time to work through the impact of any changes to their economy.

The categories

| Category | Support Value (SV) | Typical population (M) | Features |
|----------------------|--------------------|------------------------|---|
| Home Worlds | Sol | 450 | Has well-developed industries, many orbital and off-world facilities, lots of Hyperspace Transmission Stations (HSTS) and shipbuilding facilities can be based here. Tends to be very stable, economically. |
| | New Venus | 200 | |
| | New Mars | 200 | |
| | Asteel | 300 | |
| | Sirius | 150 | |
| | Centaur | 150 | |
| | Wolf | 400 | |
| | Xyon | 300 | |
| Colonial Capital | 80 | 100+ | Has many orbital facilities, Many HSTS, and can support shipyards. |
| Very Rich Colony | 60 | 50+ | Has several orbital facilities and can support shipyards. 3 or 4 HSTS. |
| Rich Colony | 40 | 20+ | Has one or two orbital facilities. 1 or 2 HSTS. |
| Above Average Colony | 30 | <=20 | Has one main orbital station and one or two HSTS. |
| Average Colony | 20 | <=15 | Has one main orbital station and one or two HSTS. |
| Below Average Colony | 10 | <=15 | Has one main orbital station and one or two HSTS. |
| Poor Colony | 5 | <=10 | Small orbital, one HSTS. |
| Very Poor Colony | 2 | <=8 | Small orbital, possibly one HSTS. |
| Subsistence Colony | 0 | <=5 | No significant orbitals, no HSTS |
| Just Settled | -1 | <=1 | Just arrived and setting up a new colony. |

| | | | |
|-------------|---|---|---------------|
| Uncolonised | 0 | 0 | Nobody there. |
|-------------|---|---|---------------|

3.2 The Shopping List

The key issue in the Universe is not how much something costs to build, but how easy it is to maintain over a long period. Maintenance costs are the more significant factor, because short-term resources can always be found to build things, but the running costs are usually much more difficult to sustain.

So, in order to keep things simple, the rules allow you to build anything you have the spare Support Value to keep going.

And, if your available support value declines, so you have to give up something.

Basic Assumptions

All nations are assumed to have a number of shipyards and training establishments, sufficient to maintain their existing forces - shipyards are vital for maintenance because all ships need refitting on regular schedule, and small ships need replacing regularly. This is all factored in to the Support Value concept.

So shipyards and training centres and the like are usually not separately accounted for. That said, a key issue is usually the location of shipyards. These have to be at systems of a certain minimum size - and politically, ship building is not permitted outside the Home Systems in Quadrant Zero. All quadrants have a repair capacity, usually located at the quadrant capital. In addition, fleets cannot operate effectively if there is insufficient SV in the quadrant to support them. This can mean that surplus SV is often imported from nearby quadrants to support particular operations (as was the case during the Exterminator War).

| | Item | SV required to operate | Time to construct (days) | Logs needed | Logs support | Combat value | Notes |
|------|---|------------------------|--------------------------|-------------|--------------|--------------|---|
| | Colonial Government (per quadrant) - per colony world under control including capital | 3 each | 100 | n.a. | n.a. | n.a. | There are a whole range of support costs involved in running a colonial government. This is obviously proportional to the number of worlds. |
| SC | Interplanetary (IP) Scout | 1 | 200 | 2 | 0 | 1 | Destroyer-sized vessel optimised for detection. |
| SCI | Interstellar (IS) Scout | 2 | 400 | 2 | 0 | 1 | |
| DD | IP Destroyer | 1 | 200 | 2 | 0 | 3 | |
| DDI | IS Destroyer | 2 | 400 | 2 | 0 | 3 | |
| CL | IP Light Cruiser | 2 | 200 | 3 | 0 | 5 | |
| CLI | IS Light Cruiser | 3 | 400 | 3 | 0 | 5 | |
| CA | IP Heavy Cruiser | 3 | 200 | 4 | 0 | 8 | |
| CAI | IS Heavy Cruiser | 4 | 400 | 4 | 0 | 8 | |
| HBB | IP Heavy Battleship | 6 | 600 | 7 | 0 | 20 | Can only be interplanetary due to its size |
| BB | IP Battleship | 4 | 200 | 5 | 0 | 12 | |
| BBI | IS Battleship | 6 | 600 | 5 | 0 | 12 | |
| CV | IP Carrier | 4 | 300 | 6 | 0 | 17 | |
| CVI | IS Carrier | 6 | 600 | 6 | 0 | 17 | |
| SAB | IP Semi-Automatic Battleship | 3 | 400 | 6 | 0 | 13 | Can only operate with an LSSI dedicated to each SAB. |
| SABI | IS Semi-Automatic Battleship | 5 | 800 | 6 | 0 | 13 | |
| TPT | IP Transport | 2 | 200 | 8 | 0 | 0 | Designed to transport a Ground Force Division or the equivalent in one lift. |
| TPTI | IS Transport | 3 | 400 | 8 | 0 | 0 | |
| ALS | IP Assault Landing Ship | 3 | 200 | 7 | 0 | 2 | Can carry half a Division and land it on a planet. |

| | Item | SV required to operate | Time to construct (days) | Logs needed | Logs support | Combat value | Notes |
|--------|--|------------------------|------------------------------|-------------|--------------|--------------|--|
| ALSI | IS Assault Landing Ship | 5 | 500 | 7 | 0 | 2 | |
| LSS | IP Logistic Support Ship | 2 | 200 | 1 | 30 | 0 | Essential specialised logistics ship. |
| LSSI | IS Logistic Support Ship | 3 | 300 | 1 | 30 | 0 | |
| SSI | IS Survey Ship | 6 | 400 | 1 | 1 | 2 | Specialised autographical survey ship, used for mapping systems and navigational hazards. |
| C5 | Class 5000 Merchant Ship | 0.5 | 200 | 1 | 15 | 0 | Largest class of civilian merchant ship. |
| C5A | Armed Class 5000 Merchant (Star Guard) | 1 | 200 new build or 50 upgrade | 1 | 8 | 1 | These are widespread as protection against pirates. Usually locally based and organised. Only lightly armed. |
| EVI | Merchant Escort Carrier | 2 | 250 new build or 100 upgrade | 2 | 0 | 2 | |
| AMI | Armed Merchant | 3 | 300 | 3 | 10 | 4 | Purpose built heavily armed merchant. |
| SRI | Salvage & Recovery Ship | 3 | 300 | 3 | 0 | 0 | Used to dismantle and salvage all manner of equipment. |
| HSI | Hospital Ship | 5 | 500 | 7 | 0 | 0 | Aids recovery of wounded etc for a fleet. |
| | Ship Conversion | As new type | Variable | n.a. | n.a. | n.a. | Conversions can take place either at a shipyard OR repair yard. |
| | Repairs | Free | Variable | n.a. | n.a. | n.a. | This is included in the support value assumptions. |
| GFD | Regular Ground Force Division | 3 | 200 | n.a. | n.a. | (11) | |
| GFB | Independent Ground Force Brigade | 2 | 150 | n.a. | n.a. | (5) | |
| PGD | Planet Guard Division | 2 | 200 | n.a. | n.a. | (7) | Locally recruited troops. Cannot be moved off-world. |
| ISD | Police / Internal Security Division | 3 | 300 | n.a. | n.a. | (5) | Especially good for dealing with insurrection and civil policing. |
| MD | Militia GF Division | 1 | 100 | n.a. | n.a. | (3) | Lightly equipped local forces. Cannot be moved off-world. |
| IMR | Independent Marine Regiment or Special Forces Regiment | 1 | 200 | n.a. | n.a. | n.a. | Ships and stations are assumed to have their own regiments included in their support values. |
| IPS | Independent Pacifier Squadron | 1 | 100 | n.a. | 0 | 10 | Carriers are assumed to have their complement included in their cost. One Squadron of defensive pacifiers are assumed attached to all orbital stations are included in their support values. |
| | New Senior Headquarters | 2 | - | n.a. | n.a. | n.a. | Fleet headquarters are assumed. These are new joint commands or special command and control arrangements |
| SBHEWS | Surface Based Heavy Energy Weapon System | 2 | 300 | n.a. | n.a. | n.a. | An array of weapons capable of engaging ships in low orbit, or conducting an assault landing. Generally only useful for point defence – such as a single city. |
| | New Specialised Research and Development Establishment | 4 | 400 | n.a. | n.a. | n.a. | You already have some R&D built into the infrastructure - this is if you want to do something you haven't done before. |
| | New Shipyard | 10 | 400 | n.a. | n.a. | n.a. | Allows for 2 ships under construction at any one time. Can be used as a repair yard if not being used for new builds. |
| | New Repair Yard | 5 | 300 | n.a. | n.a. | n.a. | Allows for the repair of 3 ships at any one time. |
| | Extra Interstellar Communications | 1 | 200 | n.a. | n.a. | n.a. | Each additional HSTS over the numbers assumed in a system of the appropriate type. |

| | Item | SV required to operate | Time to construct (days) | Logs needed | Logs support | Combat value | Notes |
|--------|--|--|--------------------------|-----------------------|--------------|--------------|---|
| SNBC | Shake N' Bake Colony - in established quadrant | 25 | 100 prep + 600 on world | 4 x LSSI for duration | n.a. | 0 | Government directly priming a world for colonisation. Counts as Subsistence Colony after it has been completed and fully operational for 1 year - and the SV cost ceases and it continues as a normal colony. |
| SNBC | Shake N' Bake Colony - in Outer Sector | 40 (provided a neighbouring Q can handle it) | 250 prep + 800 on world | 8 x LSSI for duration | n.a. | (1) | |
| SCol | Science Colony - Quadrant | 6 | 50 prep + 300 on world | 1 X LSSI for duration | n.a. | 0 | A self-contained scientific colony, set up by government. This does not upgrade to a proper colony though one might arrive normally. |
| SCol | Science Colony - Outer Sector | 10 (provided a neighbouring Q can handle it) | 100 prep + 400 on world | 2 x LSSI for duration | n.a. | (1) | |
| MilCol | Military Colony - Quadrant | 8 | 100 prep + 400 on world | 2 x LSSI for duration | n.a. | (2) | A self-contained military colony set up by government. This does not upgrade to a proper colony. |
| MilCol | Military Colony - Outer Sector | 15 (provided a neighbouring Q can handle it) | 200 prep + 600 on world | 4 x LSSI for duration | n.a. | (4) | |

Ship Building Capacity

Construction of new ships requires spare shipbuilding capacity. Much of the current shipyard space is taken up with maintenance and refitting or is not controlled by the government.

Without expending SV, each polity has a only one shipyard not already tied in maintaining the current fleet. At the start of the Megagame however, most polities are funding additional shipyards, at the rate shown in the SV table above.

The additional yards allow for the ongoing maintenance of the new ships built. For the purposes of shipyard capacity, the construction of an Independent Pacifier Squadron counts as a single ship

Mothballs: Ships can be mothballed and stored in stable orbit at any colony that is 'Average' or better (they have the facilities to keep the mothballed ships monitored and safe. Mothballing does not cost SV, but takes 30 days (during which time the normal SV of the ship is still payable). Bringing ships out of mothball takes 75 days, and the full SV must be paid for the entire period of recomissioning.

A shipyard or repair yard can be mothballed too. The mothballing does not cost extra SV, but takes 50 days during which time the normal SV of the yard must be paid. bringing a yard out of mothballs takes 200 days, and the full SV must be paid during the period of recomissioning.

Decommissioning: Ships can be scrapped at any time at any colony that is 'Rich' or better (they have the necessary economy and facilities to decommission a military ship), or at any system with a repair yard. It takes 30 days to decommission a ship in this way, during which time the full SV must continue to be paid.

Using Repair Yards : The repair yard is used to repair battle-damaged ships (obviously). A repair yard cannot be used to build new ships.

Conversion : Existing Interplanetary (IP) ships can be converted to Interstellar (IS). To do this takes a shipyard slot, the difference in SV must be available, and it takes the difference in construction time between the IP and IS class, PLUS 40 days.

3.3 Interstellar Banking

Since the level at which we are considering planetary economics much of the resources are in terms of manpower, skills, technology, refined materials and industrial capacity. Only a small proportion of this is in transferable cash terms, and even if it were, there are limits on how successfully a cash credit transfer to a backward colony could aid its economy if it lacked the basic resources itself.

As mentioned above, polities can pool the SV within a quadrant, but can only transfer up to 10% of the SV of that pool to any adjacent quadrant/sector, or 5% to a more distant quadrant/sector.

NB: The 10% limit is per transfer per quadrant/sector - so you could transfer 10% to each of several quadrants/sectors.

In addition, transferable SV may not be more than 24SV or 50% (whichever is greater) of the total starting local SV already in the receiving quadrant/sector before any transfers.

So, for example, a quadrant with a total starting SV of 80, would only be able to import up to 40SV in transfers from all sources. A quadrant with 10SV could import up to 24SV.

The level of transfer between quadrants/sectors is reviewed quarterly (i.e. every 100 days or two turns) and is changed at that point only. This represents the lead time to organising and maintaining these interstellar transfers of resources.

3.4 Economic Development

Colonies normally develop as a result of trade, the effectiveness of the colonists, corporate investment, and government investment.

It is not possible to just buy outright an upgrade of a colony using SV - though SV could be deployed to improve infrastructure. The problem is that if you subsidise an economy, you have to keep on subsidising it - and this would not generate additional SV.

However, SV can be used to 'prime the pump' of inward investment provide incentive or tax breaks etc. This is risky, since it can fail, and the return (if any) can be long term.

Also, colonies can rise or decline as a result of factors outside your control. At the start of each year, there is a **status test** for all colonies.

Game Note: Colony Status Test

This process can be done manually, but with over 2000 colonised worlds in the Universe it is a bit tedious. We now have a computerised system that does the updating every year – and this takes the investment figures and other factors and produces a printout and a database of the results at the end of each year. The program uses the rules exactly as shown here.

Investment of SV in developing an economy is on the basis of a full year of investment.

SV only invested for periods of less than a year are reduced in proportion and in any case can only be in periods of 100 days (2 turns).

Colony Status Test

Roll 1d10 (0=0) once per year

| | Current Status | Effect of Government SV Investment during last year | Max SV investment allowed per year | Resulting Change in Status | | |
|----|----------------------|---|------------------------------------|----------------------------|-----------|-------------------|
| | | | | Decline one level | No change | Improve one level |
| CC | Colonial Capital | +1 per 20 | 40 | 0 | 1+ | n.a. |
| VR | Very Rich Colony | +1 per 18 | 36 | 0-1 | 2-10 | 11+ |
| RC | Rich Colony | +1 per 15 | 30 | 0-1 | 2-9 | 10+ |
| AA | Above Average Colony | +1 per 12 | 24 | 0-2 | 3-9 | 10+ |
| AC | Average Colony | +1 per 10 | 20 | 0-1 | 2-8 | 9+ |
| BA | Below Average Colony | +1 per 8 | 16 | 0 | 1-7 | 8+ |
| PC | Poor Colony | +1 per 5 | 10 | 0-2 | 3-7 | 8+ |
| VP | Very Poor Colony | +1 per 3 | 6 | 0 | 1-7 | 8+ |
| SC | Subsistence Colony | +1 per 2 | 4 | 0-3 | 4-7 | 8+ |
| JS | Just Settled | +1 per SV | 2 | 0-4 | 5 | 6+ |
| UI | Uncolonised / Empty | - | 0 | - | 0-5 | 6+ |

Independent worlds cannot develop beyond Average on their own. They have to join a major power (see Membership, below), or form a politico-economic federation with at least 6 other independents to do so.

In general, only Poor Colonies or better are taken into a political grouping, though there is nothing to stop a polity accepting poorer colonies for political reasons.

Game Control will also apply arbitrary plusses and minus to the improvement roll to reflect political and economic circumstances on individual worlds or even on a quadrant-wide basis.

As shown in the table above, worlds' economies can decline as well as improve. Investment helps prevent this, but other factors will encourage it.

Any colony attacked and forcibly taken under control by a polity will automatically decline one economic level.

A Home World level economy is stable and does not alter in any given year, unless as a result of some huge upheaval or political change.

3.5 Insufficient SV

There may be times when the SV of a quadrant is not enough to support all the activities going on in that quadrant. This can, of course, be ameliorated by transfers in - but even that may not be enough, or might not be able to respond to a short term crisis.

Fleets may be moved across quadrant boundaries in 'hot pursuit' without using visited quadrant's SV so long as they return to their 'home' quadrant within 50 days. Over 50 days and they have to be supported by the quadrant they are visiting.

Quadrants that go in the red on SV, must cease economic investment until balance has been achieved.

If this is not enough, and no forces can be disbanded or mothballed to restore the balance, then the following penalties apply:

1. Each of your systems in the quadrant reduces its loyalty.

2. The forces supported in the quadrant will lose effectiveness due to shortages in the logistic train - they should be treated as though they are one supply level lower than their current state (so if they are at supply state GREEN, they drop to AMBER).

3.6 Membership of Polities

At various times, independent worlds consider joining one of the eight major powers.

Sometimes this happens as a result of internal needs (see economic development above) or as a result of pressure from one or more external polities.

The process is influenced by investment, location, situation and a substantial random element.

In game terms, a player team may request that an independent is tested. The process is then as follows:

1. Initial Interest. The locals may have absolutely no interest whatsoever. Roll 1d6, modified as follows: This can only be tested once per year.

| | |
|----------|---|
| +1 | Nearest system is a member of requesting polity |
| +1 | The system is currently being invested in by testing polity |
| +1 | The system is in Q5, Q6 or Q7 |
| +1 | The system is at Average Status |
| -2 | The system is in Quadrant Zero |
| +1 | System has been subject to a major attack in the last year, (such as by Exterminators). |
| +3 to -3 | Game Control Assessment Modifier |

Score 6 to get acceptance to the principle. If the principle is accepted, move on to:

2. Referendum Stage. Internal politics come to bear here - and there is a much larger random element. This might also be competitive with other polities.

The locals will decide to hold a referendum - this is organised locally, and interested parties cannot be involved.

Only one referendum per year can be organised, and it will be held 1d4 x 100 days after the principle has been agreed.

So, to determine the result, roll 1d100 for each interested party - this will be each polity attempting to get them to join, plus the 'NO Party'.

The nearest neighbouring polity will also automatically be included in the vote by the locals, whether they want to be or not.

Each party's score is modified by:

| | |
|------------------------|--|
| +1 | For each SV from investment per year, averaged over the past three years. |
| +10 | For a successful political manoeuvre |
| -10 | That polity previously refused membership to a world in this quadrant in the last 5 years. |
| +10 to -10 | JIM0000 Interference Modifier |
| The highest score wins | |

This system means that occasionally, systems will choose to join a polity unexpectedly.

Game Note: The above system may be dispensed with as necessary utterly at Game Control's whim, if it benefits the plot.

Polities do not have to accept them into membership if they do not want to – but to refuse an application for membership might be unpopular politically.

3.7 Key Personnel

In every polity there are hundreds of thousands, if not millions of civil servants, military officers, leaders, scientists etc.

These are deployed to run your polity in a variety of roles, such as quadrant or planetary governors, admirals, senior diplomats etc.

These non-played characters are expected to act on their own initiative and be reasonably effective all of the time. Distances and communication delays make that imperative.

Each polity also has, within this group of public servants or similarly significant people, its **key people** (KP). These are the most reliable, most effective, best of your polity. And, of course, they are limited in number. Their deployment should be an important part of the government's decision-making.

We mark the effectiveness of KP with a personal score, on a scale of 1 to 10. The vast majority of your senior public servants are rated 5. This means that they will act pretty much in the way the players would have expected (or better) around 50% of the time. The rest of the time they will do something different (and still effective, perhaps), or do nothing.

The important KP are those with scores above 5. These are limited in number and must be specific named individuals. The number of KP better than 5 in each polity is based on their population. Most polities get 1 KP for every billion of population - except Earth, which has only 1 KP per 2 billion.

If a named KP dies then a new person can be created to replace them, but their rating is unknown until they have been given a job to do and they have been doing it for some time. The GM will then tell you what their rating is.

3.8 Logistics Support

Starships operate for many hundreds of days in deep space, away from bases, repair yards and orbital stations.

All ships have larger crews than is strictly necessary to operate the ships because they need to be able to cope with illness and accident, and have sufficient resources to maintain their own ship a lot of the time. In addition, in the absence of magical 'replicator' technology, they need to be resupplied with food concentrates and spares, ammo etc. Reaction mass and water is collected from systems when they are visited. These supplies are carried by the ubiquitous Logistics Support Ship, Interstellar (LSSI) or by merchant cargo ships. All functioning fleets need these to keep operating.

Some of these support ships will be in transit from bases to the fleet, or on long-range missions a fleet will take a number of laden LSSI with them, which then rotate with others to keep the supplies coming.

In the Universe Campaign, use the following rule of thumb to assess the logistic needs of any force.

First, assess its need - this is calculated on a Logs Point basis - add up the points for any force and compare them with the Logs Support Capacity available to the force. The main list of logs points needed and capacity available is in the shopping list section above.

This table has the values for a few things not listed there:

| Ship Type | Designation | Logs Need Points | Logs Support Capacity |
|-------------------------------------|-------------|------------------|-----------------------|
| Merchant Class 5000 | C5 | 1 | 15 |
| Merchant Class 4000 | C4 | 1 | 12 |
| Merchant Class 3000 | C3 | 1 | 10 |
| Merchant Class 2000 | C2 | 0.5 | 6 |
| Merchant Class 1000 | C1 | 0.5 | 3 |
| SNB Colony | SNBC | 0 | 5 |
| Science Colony | SCICOL | 0 | 10 |
| Military Colony | MCOL | 0 | 30 |
| Poor Colony Orbital Facilities | PCOF | 0 | 30 |
| Average Colony Orbital Facilities | ACOF | 0 | 100 |
| Rich Colony Orbital Facilities | RCOF | 0 | 500 |
| Colonial Capital Orbital Facilities | CCOF | 0 | 1000 |
| Home World Orbital Facilities | HWOFF | 0 | Unlimited |

Status GREEN : If the Logs support equals or exceeds the Logs Point needs of a fleet, then all is well, and we assume the logistic state is good.

Status AMBER: If the Logs support is less than the fleet's needs, the effectiveness of the fleet is assumed to be degraded.

Status RED: If the Logs support is less than half the fleet's needs, you can assume the fleet has serious supply problems, and really ought to visit an orbital station quite soon.

In the case of fleets sitting on an M²⁵ limit of an inhabited friendly colonial system with an orbital station (as they often are), you can effectively double the value of the LSSIs accompanying the fleet because they can visit the system's station every few days. Obviously, if the fleet moves off suddenly, there is a risk that they might leave some or all of their LSSIs behind.

3.9 Space Combat

In the unlikely event of fighting between fleets, Game Control will probably use the combat power figures given in the 'shopping list' table above to calculate the total combat power for each fleet engaged.

Logistics modifiers:

Status GREEN: (LOGS FACTOR >=1): 100% CV effective

Status AMBER: (LOGS FACTOR <1): 50% CV effective

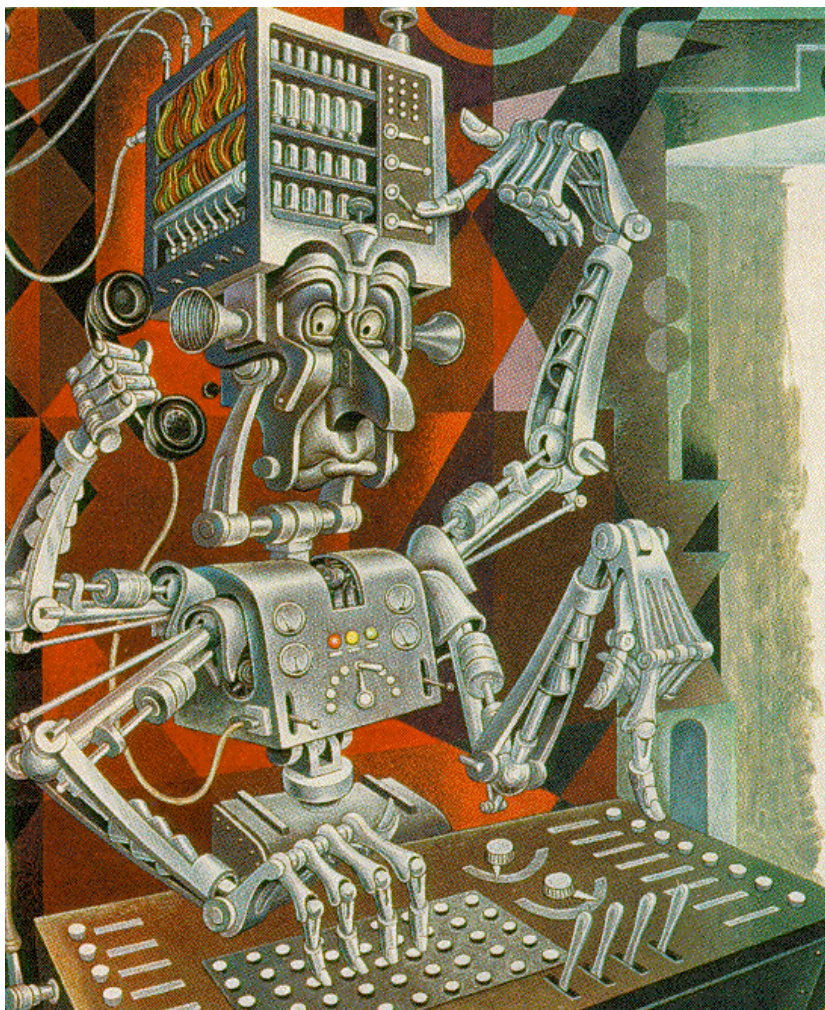
Status RED: (LOGS FACTOR <0.5): 25% CV effective, increase losses by 25% (reflecting shortages of spares & replacements)

Compare combat power, then consult this table:

| Comparison | Result | Losses |
|--------------------------------|--|---|
| Scores within 5% of each other | Indecisive. Depending on orders and situation, either might break off contact. | Both take hits equal to 20% of the enemy's Combat Value. Usually spread over the fleet. |
| 6-10% superiority | Weaker force breaks contact and flees. | Loser takes 10% of winner's CV Winner takes 8% of loser's CV |
| 11-20% superiority | Weaker force breaks contact and flees. | Loser takes 12% of winner's CV Winner takes 6% of loser's CV |
| 21-30% superiority | Weaker force breaks contact and flees. | Loser takes 14% of winner's CV Winner takes 5% of loser's CV |
| 31-40% superiority | Weaker force breaks contact and flees. Stronger force able to inflict damage as they go. | Loser takes 25% of winner's CV Winner takes 5% of loser's CV |
| Over 40% superiority | No combat - weaker force refuses battle. | n.a. |

The above table is for human versus human battles.

Against Exterminators or newly emerged threats the rules may be different sometimes.



JIM9000 Bright Slave Computer

ANNEX A: EXISTING TREATIES

There have been many treaties agreed over previous centuries. This is a summary of the main ones.

| Treaty Name | Signatories | Main purpose | Entry into force | Expires |
|--|--|---|------------------|-----------|
| Vienna Convention on Diplomatic Relations | All polities | Sets out agreed definitions of diplomatic protocols, legal status of embassies, ambassadors etc. | 2621.018 | No expiry |
| Treaty of Utopia | Nasa Helix Brotherhood Boeing Aerospace Church Of The Seventh Coming Free Belters Mizu Zaibatsu Solar Tech The United Nations of Earth. | Agreeing to share Mek Semaj's work and to try and re-establish contact with the 'Aliens'. | 2858.056 | 2880.200 |
| Wolf359 Treaty of Secession | Wolf Commonwealth Solar Republic of Earth | Agreeing to Wolf Commonwealth's independence from the Solar Republic | 2924.227 | No Expiry |
| Union of Xyon Treaty of Independence | Union of Xyon Solar Republic of Earth | Agreeing to Union of Xyon's independence from the Solar Republic | 2943.118 | No Expiry |
| Treaty of Io (New Mars secession) | Mars Association Solar Republic of Earth | Agreeing to the Mars Association's independence from the Solar Republic. Also agreed that Old Mars remain a part of Solar Republic in perpetuity. | 2945.031 | No Expiry |
| Treaty of Bates | All Polities | Astrographical definitions treaty, agreeing quadrant and sector boundaries and Universal Grid System. | 2950.234 | No Expiry |
| Treaty of Geneva | GFA Earth Empire MAFC SSR UOX CC Wolf | Treaty agreeing that Mass Driving was an unlawful weapon of war. | 2977.120 | No Expiry |
| Congress of Europ: MDF Independence Treaty | All Polities | Assertion and agreement of independent status of the Mald Democratic Foundation. | 2981.087 | No Expiry |
| Treaty of M'Drid | All polities | Treaty isolating and quarantining the system of M'Drid in Quadrant 7 | 2993.025 | No Expiry |
| Congress of Gorilla | All Polities | Formation of Venerian Republic | 3095.200 | No Expiry |
| Saturn | All polities | Defining and agreeing the | 3101.143 | No Expiry |

| Treaty Name | Signatories | Main purpose | Entry into force | Expires |
|--|--------------------------------------|---|-------------------------|------------------------------------|
| Convention | | status of non-combat vessels in time of war. | | |
| Treaty of Potomax | All polities | Local Treaty agreeing to and setting up Joint Command arrangements in Quadrant 7 | 3198.231 | Superseded by Treaty of Old London |
| Treaty of Over | All polities | Local Treaty agreeing to and setting up Joint Command arrangements in Quadrant 5 | 3199.200 | Superseded by Treaty of Old London |
| Treaty of Old London | All Polities | Treaty setting up humanity-wide joint command arrangements in the face of the Exterminator Menace | 3200.010 | No expiry |
| Treaty of Old London (Asteel Revision) | All Polities | Updating original treaty to clarify force levels and command arrangements | 3203.150 | No expiry |
| New Washington Treaty | Earth Empire GFA Union of Xyon | Treaty agreeing to non-aggression, spheres of influence, and military cooperation | 3201.230 | No expiry |
| Treaty of Friendship and Cooperation | Wolf Commonwealth Union of Xyon | Covering various economic, legal, cultural and military matters | 3202.219 | No expiry |
| New Mars / New Venus Entente | MAFC RNV | Defensive Alliance and treaty of military and economic cooperation | 3202.001 | 3207.001 |
| Egg and Peas Treaty | GFA UoX | Economic Cooperation | 3202.040 | No expiry |
| Commonwealth / Venerian Friendship treaty | Wolf RNV | Economic and Military Cooperation | 3202.135 | No expiry |
| Union of Xyon – Venerian Treaty of Understanding | UoX RNV | Military and economic cooperation | 3202.300 | No expiry |
| MDF / RNV Treaty of Mutual Recognition | MDF RNV | Formalising end of Mald-Venerian War. Agreeing to military and technical cooperation | 3202.300 | No expiry |
| H-Force treaty | Earth Empire UoX GFA | Setting up a joint command and mutual defence force. | 3201.230 | 2 year review |

ANNEX B: Who is Who In Quadrant Zero

(Players in Bold)

| | |
|--|---|
| Centauri Conglomerate | |
| Virgil Atlantic | Chief Executive and Chair of the Centauri Democratic Board |
| Conrad White | Deputy Chief Executive and Finance Director |
| Camilla Olivetti | Compliance Director (Head of the Office of the Regulator) |
| Ibrahim Ba Suwaydan | OR Director |
| Marcella Bich | Marketing and Corporate Relations Director |
| Feroze Gandhi | Director of Security (Head of Office of Defence) |
| Tokuji Hayakawa | Director of Econint HQ |
| Imra Ardeen | Director of MIND HQ |
| Otto Mønsted | Ops Director Fleet Defiance |
| Martha Ballard | Ops Director Fleet Partnership |
| Antonia Sinkel | Ops Director Fleet Harmony |
| Greater Federation of Asteel | |
| President Alphonse Z Potato | Head of State and Chief Executive of the Greater Federation of Asteel and Associated Systems. |
| Senator Ross T Frink | Deputy President; Senator of New Edo |
| Gerry O'Brien | Secretary of State |
| Stan 'the Man' Morgan | Secretary of Defence |
| Margarita Valdez | Secretary of Economic Development |
| Rhona McDonagh | Secretary of Agriculture |
| Archibald Boomslang | Secretary of Consumer Rights |
| Alan Jeffries | Secretary of Justice |
| Professor Leroy Squash | Secretary of Education |
| Jez Oluwale-Diamond | Secretary of Space Transportation |
| Pippa Moonmaiden | Secretary of Energy |
| Arturo Ingellis | Top Political Advisor |
| Macy Okosh | Head of Secret Intelligence Service |
| Ultraparamount Admiral Hogan Stipes | CinC of the Federation General Staff; CinC GFAN; CinC Interplanetary Forces and Scout Forces |
| Admiral William S Graham | Chief-of-Staff, GFAN |
| Admiral Lorrie-Lou N Ostrichburger | CO Fleet Rufus G Herring |
| Admiral Euprepia Orwell | CO Fleet Charles E Kelly |
| Admiral Nguyen Gamgee | CO Fleet Bernard J Ray |
| Admiral Ronwell S Tirana | CO Fleet Rodger W Young |
| Admiral Megan Steeple | CO Fleet John E Butts |
| Admiral Suzette Timpani | CO Fleet Audie L Murphy |
| Planet Marshal Ving Brapp | CinC Ground Forces |
| Admiral Tanya Hardy | Human Resources Development, GFA Forces |
| Mars Association of Free Colonies | |
| Charles L Harness | Supreme Councillor of the Martian Union; Martian Central Committee |

| | |
|------------------------------|---|
| Drakkir Hands | Senator for Q0; Minister for Foreign Affairs; ICC |
| Minos Cornelius | Senator (Military); Federal Minister of War; ICC |
| James Frink | Senator (Academic); Department of Science and Technology; ICC |
| Phil Dermond | Senator for Q4; Federal Minister of Domestic Affairs; ICC |
| Akira Sumitomo | Senator for Q2; Department of Trade and Industry; ICC |
| Theresa Shrike | Senator (Commercial); Department for Cultural Affairs; ICC |
| Greta Bjarnsdottir | Senator (Commercial); Federal Minister of Finance; ICC |
| Emma Bleedingheart | Senator (Social); Federal Department of Justice; ICC |
| Judge John Deedes | Senator (Legal); Senior Justice of the Association |
| Antoinette Banderas | Senator for Q5 |
| Carver Mishitak | Director General of MAIDS |
| A KreeStee | Federal Head of External Intelligence |
| Peter Carrington | Head of Joint Intelligence HQ |
| Director Borrowdale | Institute of Advanced Planetary Studies |
| Cho-Sho Umeda | CinC Q0 |
| Tai-Sho Zapata | CinC Home Fleet |
| Sho-Sho Tappan-Wright | Commander Strategic Fleet |
| General Hyaspedes | Commander Martian Marines |
| Tai-Sho H De Soto | Inspector General of Colonial Defences |
| General Ryan | Commander Martian Ground Forces |
| M Medalanus | Director in Chief of Military Intelligence |
| Tai-Sho Toho | Principle Combined Services College |
| Republic of New Venus | |
| President Heinlein | President of the Venerian Republic |
| Andrei Kudriavy | Deputy President of the Venerian Republic |
| Constantine Efimova | Minister of Information |
| Han Fei Tzu | Minister for Moral Affairs |
| Dr Mona Trepoleezi | Minister of Finance |
| 'V' | Head of Venerian Intelligence |
| David Brin | Personal Assistant to the President |
| Professor General Lavochkin | Head of Military Science, Military Science Base Alpha Zero |
| Manly Barrilow | Chief Administrator, Military Science Base Alpha Zero |
| Professor Valery Kondakova | Head of Forerunner Research, Special Scientific Base Alpha Zero Two |
| Piers Van Loom | Chief Administrator, Special Scientific Base Alpha Zero Two |
| Pyotr Leonidovich Kapitza | Head of BETAMAX |

| | |
|--|---|
| Admiral Erika von Danikin | Chief of the Venerian Naval Staff; Head of the Venerian Ministry for the Military |
| Grand Admiral Alexandra Shumilov | Military Consultant to RExCom; Commander 12th Strategic Fleet |
| Admiral Kremilovski | Military Commander Q0; Commander 10th Training Fleet |
| Admiral Fifi Aleyda | 1st Exec 12th Strategic Fleet |
| Admiral Jinjiro Bielitzki | Commander 13th Ghost Fleet |
| Admiral Nicolai 'Wild Bill' Borsoi | Exchange with Fleet D of the Mald Provost Corps |
| Sirian Socialist Republic | |
| Ryszard Kapushinski | President of the Republic; President of the Council of State |
| Gu-An San-Martin | Minister of Defence |
| Carla Kaw-Ski | Minister of Colonies |
| Rose Looburg | Minister of Finance |
| Nathan Kinsky | Minister of Foreign Affairs |
| Marcus Bakker | Minister of Justice and Information |
| Estelle Sent-Simon | Minister of the Economy |
| Bob Sokal | Minister of Public Services |
| Firdaus Al Ahmadura | Minister of Science and Robotics |
| Soon Yat-sen | Governor Quadrant Zero |
| Dr Aurangzeb Alamgir | Director of the Sirian Secret Services |
| Admiral Diane Selwyn | Navy Chief of Staff |
| Admiral Gudmundur Aegilson | Navy Staff Home Fleets |
| Admiral Cammilla Rhodes | Navy Staff Colonial Fleets |
| Admiral Adam Keshar | CO 1st Workers Fleet |
| Admiral Betty Elms | CO 2nd Workers Fleet |
| Admiral Preity Zinta | CO 3rd Workers Fleet |
| Admiral Chiaki Kuriyama | CO 5th Shock Fleet |
| Admiral Duma Ka Ndlovu | CO 10th Fleet |
| Marshall Matters III | Commander Ground Forces, Sirius |
| Brigadier General Si Ha-Nook | Commander Ground Forces, Petra |
| Brigadier General Festus Okonkwo | Commander Ground Forces, Novo |
| The Solar Republic (Earth Empire) | |
| Henry Rathbone | The First Citizen |
| Senator Lee Zhang | First Minister; Minister of Finance and Resources; Minister of Defence |
| Senator Bailey | Colonial Minister |
| Senator Hilmi Ozkok | Minister of External Affairs |
| Senator Eduard Kvashnin | Home Minister |
| Senator Pingtun Lee | Justice Minister |
| Senator Mainichi Shimbus | Minister of Technology and Science |
| Senator Julio de Andres | Minister of Welfare and Culture |
| Senator Bernard Malvolio | Office of Martian Affairs |
| 'A' | Director of the Imperial Audit Office |
| Cordelia Lu | Supreme Justice |
| Dr Aled Shashkavilli | Director of the Solar Survey |
| Nan Szu Pu | Governor of Old Mars |
| Grand Admiral Ibn Battuta | First Lord of the Admiralty |
| Admiral Ma Huan | First Space Lord |
| Admiral James Schmitt | Second Space Lord |
| General Roger | Commandant General of the |

| | |
|---|---|
| Hammerstein | Marines |
| Admiral Feng Shui | Director of Naval Planning |
| Admiral Philips | Admiral Tenth Battle Fleet |
| Admiral Chou-San | Admiral Sixteenth Mobility Fleet |
| Admiral Gantt | Admiral H Force |
| Admiral Puzo | Admiral Fourteenth Battle Fleet |
| Admiral Burwasher | Admiral Eleventh Battle Fleet |
| Admiral Pobie | Admiral Twelfth Battle Fleet |
| Admiral Allen | Admiral Thirteenth Battle Fleet |
| Union of Xyon | |
| Tarik Faraj HoX QM | The Speaker of Xyon |
| Dan Tassić SM | Prime Minister of the Union; Leader of Maskalim |
| Mitsuya Dake SM | Commercial Secretary; Leader of the Labour Party |
| Hal Kussik SM | Treasury Secretary |
| Rachael Bashara SM | Secretary General of the Union; Leader of Harikat Amal |
| Leila Lwellyn SM | Secretary of Defence |
| Gideon Rafael SM | Secretary of External Affairs |
| Daniel Kalin SM | Secretary of Science and Research |
| Suzie Quatro SM | Speaker of the Sanhedrin |
| Rabbi Theo Koslov | Chief Rabbi (Orthodox) |
| Dr Isaiah Asimov | Director General of the Robot Institute |
| Dr Kila Marr | Chairman of ERIC |
| John Weissmuller HoX | Hakam of New Jerusalem; Chairman of the Deep Space Steering Group |
| Yitzakh Yogev | Director General of MOSSAD |
| Judith Sheindlin | Chief Justice of the Federal High Court |
| Admiral Claudia Kashin SoD | Chief of the Defence Staff, Office of the Navy of Xyon (Onyx) |
| General Ian Haig SoD | Chief of System Defence, Office of Planetary Defence (PDF) |
| Vice Admiral Toria Pelan RoV | Chief of Defence Intelligence, Office of Defence Intelligence (ODI) |
| Admiral J T Brokanshah SoD | Xyon Controller of Operations |
| Admiral Petter Wallenberg CoG | Xyon Controller of Support |
| General Uzi Narkiss SoD UXM | Commandant General of the Marines |
| Admiral Dan Shomron RoV | CinC 'H' Force; CinC 1st Reserve Fleet |
| Rear Admiral Xavier Montoya | CinC Home Fleet |
| Rear Admiral Amanda Hiroshi | CinC Training Fleet |
| Commodore Alan Wong | CO Asfalto Watch |
| Commodore Tiberius Van Der Waals | CO Task Force Shekinah (SMASH) |
| General S Ivanova SoD | CinC PDF Agama |
| Wolf Commonwealth | |
| Stabilo Richard Horatio Robert Windsor II KCB, DTE KotC KotRS OCS | His Majesty the King |
| Lord Michael Young | Prime Minister of the |

| | |
|---|--|
| KCB DTE | Wolf359 Commonwealth; Marquess of New London |
| Lord Gregory Lawson | Minister for the Treasury; Viscount of Nottinghamshire |
| Lord Jack Rye | Minister for Foreign Affairs and Trade; Count of Oxfordshire |
| Sir Marmaduke Pendragon | Minister of Defence; Baronet of York |
| Lord Donald Mycroft Featherstonehaugh KotC | Minister for Internal Affairs; Duke of Barba |
| Dame Wendy Nelson | Minister for Education; Dame of the Realm |
| Lord Richard Mankin | Minister for Independents; Viscount of Buckinghamshire |
| Sir Jim Hacker | Minister for Summits; Knight of the Realm |
| Lady Marsha Robertson | Head of the Quadrants Office; Baroness of Chealmsford |
| Lord Vanes Wiley KCB | Quadrant Governor; Viscount of Bath |
| High Admiral of the Pack Lord Stewart Carley DTE KP | Commander in Chief Royal Navy |
| Alpha High Marshall Ravener Fang Zill KotC GotRP KP | Commander in Chief Royal Army |
| Alpha High Marshall Space Claw Richard Abbott KotRS | Commander in Chief Royal Aerospace Force |
| Master Guardian Lady Cyndy Zhang | Commander in Chief Knight Protectors of the Great Kingdom |
| Admiral of the Grey Wolf Cecilia Noe CN(mil) | Q0 Commander in Chief Royal Navy |
| Alpha Marshall Ravener Ron Bartel GT(mil) | Q0 Commander in Chief Royal Army |

| | |
|---|---|
| Alpha Marshall Space Claw Stephen Abraham KCB | Q0 Commander in Chief Royal Aerospace Force |
| Admiral of the Red Wolf Thomas Isaac | Commander Azure Battle Fleet |
| Admiral of the Red Wolf Gary Wilhoite | Commander Black Battle Fleet |
| Mald Democratic Foundation | |
| Prof Alberto Malich | Archchancellor of the Mald Research Foundation |
| Provost Director Twosre | Director of MDF military forces |
| Sifu Piankhy | Ambassador to the Solar Republic |
| Sifu Kefren | Ambassador to the Wolf359 Commonwealth |
| Sifu Herihor | Ambassador to the Sirian Socialist Republic |
| Sifu Den | Ambassador to the Centauri Conglomerate |
| Sifu Neferirkare | Ambassador to the Greater Federation of Asteel |
| Sifu Horemheb | Ambassador to the Mars Association of Free Colonies |
| Sifu Pepy | Ambassador to the Republic of New Venus |
| Sifu Wenis | Ambassador to the Union of Xyon |
| Sifu Hatshepsut | Special Representative to the Supreme Council of Humanity |
| Sifu Smith | Deputy Special Representative to the Supreme Council of Humanity |

ANNEX C: The Universal Military Balance 3203

(Compiled by the Interstellar Institute for Strategic Studies from Open Source material)

Defence Expenditure* (percentage of total government budget):

| Centauri | Earther | Esteeler | Martian | Venerian | Sirian | Xyonist | Wolfer |
|--------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|
| 382 (47%) | 1,699 (59%) | 1,281 (50%) | 1,306 (51%) | 1,228 (48%) | 515 (49%) | 730 (56%) | 701 (57%) |

* Including Starguard

Fleet Assets:

| | EE | GFA | MAFC | RNV | CC | SSR | UoX | Wolf | MDF |
|---------------------------------------|-------------|--------|------------|--------|-------|-------|------------|------|-----|
| Battleship (BBI) | 29 | 2 | 12 | 10 (2) | 7 | 8 | 1 | 3 | 24 |
| Semi-Automatic Battleship (SABI) | | 1 | | | | | | | |
| Interplanetary Battleship (BB) | 14 | (5) | 25 | 14 | 8 | 4 (3) | 2 | 24 | 32 |
| Heavy Interplanetary Battleship (HBB) | | | | 1 | | | | | 16 |
| Carrier (CVI) | 28 | 43 | 21 | 38 (6) | 7 | 10 | | 11 | |
| Interplanetary Carrier (CV) | | 10 (5) | 2 | 9 | | | | | 32 |
| Heavy Cruiser (CAI) | 21 | 7 | 23 | 22 | 6 (3) | 7 | 10 | 12 | |
| Missile Cruiser (CMI) | 2 | | | | | | 7 | 1 | |
| Light Cruiser (CLI) | 8 | 8 | 10 | 3 | (2) | 3 | 15 | 4 | |
| Interplanetary Light Cruiser (CL) | | | | 3 (1) | | | | | |
| Destroyer (DDI) | 41 | 10 | 19 | 18 | 4 | 8 | 33 | 7 | 42 |
| Interplanetary Destroyer (DD) | 12 | 10 | 20 | 21 | 4 | 5 (2) | | | |
| Scout (SCI) | | | 8 | 8 | | | 9 | | |
| Science Scout (SC(SI)) | | | | 1 | | | | | |
| Interplanetary Scout (SC) | | | 10 | | | | | | |
| Survey Ship (SSI) | 11 | 9 | 9 | 10 | 4 | 7 | 6 | 6 | 3 |
| Exploration Survey Ship (SSXI) | 1 | | | | | | | | |
| Mobile Space Dock (SDI) | 2 | | | | | 2 | | | |
| Salvage & Recovery Ship (SRI) | | | | | | | | 1 | |
| Support Carrier (SVI) | 1 | (2) | | 9 | | | 8 | | |
| Escort Carrier (EVI) | | 1 (6) | (2) | | | | 7 (4) | | |
| Assault Carrier (AVI) | 1 | | | | | | | | |
| Logistics Ship (LSSI) | 44 (3) | 48 | 33 (2) | 28 (2) | 7 (2) | 10 | 14 | 11 | 12 |
| Interplanetary Logistics Ship (LSS) | (21) | | | | 4 | 3 (5) | | | |
| Armed Merchant Ship (AMI) | 1 | | | | | | 9 | | |
| Assault Landing Ship (ALSI) | 18 | 9 (16) | 26 | 12 | 3 (6) | 7 | 7 | 3 | |
| Hospital Ship (HIS) | | | | | | | 1 | 1 | |
| Troop Transport (TPTI) | 4 (8) | 12 | 3 (5) | 3 | (3) | 1 | 1 | 1 | 4 |
| Starguard (SG) | 110 (34) | 154 | 149 (7) | 103 | 37 | 74 | 77 (10) | 76 | |
| Starguard Escort Carrier (SG(EVI)) | 65 | | | | | | 9 | | |

| | EE | GFA | MAFC | RNV | CC | SSR | UoX | Wolf | MDF |
|---|-----|-----|------|-----|----|-----|-----|------|-----|
| Armed Class 5000 merchant (C5A) | | | | 39 | | | 4 | | |
| Specially Armed Class 1000 merchant (C1S) | | 192 | | | | | | | |
| Class 5000 merchant (C5) | | | | | 5 | | 3 | | |
| Total ¹ | 413 | 516 | 370 | 352 | 96 | 149 | 223 | 160 | 165 |
| | EE | GFA | MAFC | RNV | CC | SSR | UoX | Wolf | MDF |

¹Excludes mothballed vessels. Figures in () are mothballed.

Quick Comparisons:

| | IS Vessels ¹ | Cbt Value | SV | CpC* | Logs Req | Logs Cap | SR** |
|------|-------------------------|-----------|-----|------|----------|----------|------|
| CN | 43 | 277 | 179 | 1.55 | 146 | 289 | 1.98 |
| GFAN | 342 | 932 | 666 | 1.40 | 660 | 1545 | 2.34 |
| IEN | 211 | 1240 | 857 | 1.45 | 739 | 1341 | 1.81 |
| MPC | 85 | 420 | 294 | 1.43 | 251 | 363 | 1.45 |
| MSN | 164 | 870 | 666 | 1.31 | 610 | 999 | 1.64 |
| RWN | 61 | 386 | 257 | 1.50 | 215 | 337 | 1.57 |
| SN | 63 | 389 | 277 | 1.40 | 229 | 307 | 1.34 |
| UXN | 135 | 435 | 395 | 1.10 | 358 | 593 | 1.66 |
| VN | 200 | 1129 | 716 | 1.58 | 639 | 1162 | 1.82 |

¹ Excludes Starguard, EVIs assigned to Starguard, and mothballed.

* Crunch per Credit - Combat Value/SV.

** Support Ratio - A higher figure indicates greater capacity, or less efficiency, depending upon your point of view.

Ships per system:

| | Interstellar | % | Interplanetary | % | Starguard | % |
|-------------|--------------|------|----------------|------|-----------|------|
| CC | 2.1 | 48.9 | 0.8 | 11.7 | 1.8 | 9.8 |
| EE | 2.3 | 53.0 | 0.3 | 4.0 | 1.9 | 14.1 |
| GFA | 4.2 | 51.9 | 0.2 | 3.9 | 1.7 | 12.0 |
| MAFC | 2.0 | 51.0 | 0.7 | 10.6 | 1.8 | 11.4 |
| RNV | 2.6 | 58.3 | 0.6 | 10.2 | 1.4 | 8.4 |
| SSR | 2.7 | 53.8 | 0.5 | 5.2 | 3.2 | 14.4 |
| UoX | 5.6 | 54.0 | 0.1 | 1.1 | 3.6 | 13.0 |
| Wolf | 2.8 | 41.9 | 1.1 | 13.7 | 3.5 | 10.8 |

% = percentage of defence budget spent on IS, IP and SG vessels.