## Iain M Banks

A vage plot arc and background details for running a series of senarios in a universe inspired by Iain M Banks Culture books. Ultra-ultra high tech. The characters come from a society that builds planets and has an antiprime directive. (We know best and should interfere to save you from yourselves). Characters should be written for the game.

A science fiction campaign world for the Champions system by Mark Harris.<br>Contact Golo.Hole@Handcuff.Freeserve.CO.UK<br>Last updated:23/08/99 22:50

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Acknowledgements
This Campaign is mainly based upon the Culture series of books by Ian M Banks. I have also drawn material from Greg Bears Moving Mars amongst a whole list of other science-fiction writers. I would also like to thank Alan E West (Arctic) for letting me bounce ideas off him.

Introduction.

This campaign has been partially played and modified to suit the group playing it. It was initially conceived for a mad-thinker group, but was ultimately played by Character players. It can be modified for most types of group. However given the technology arc and the system used I don't recommend this as a hacker campaign. Ultimately nukes are fairly easily available and if you make defences capable of taking nukes then nothing short of a nuke helps in combat. Even with the weapons available the balance is difficult. Generally you have to rely on the characters not wandering about fully equipped for combat. Armoured space suits and plasma rifles do not make for good first contact missions !

The game system I used here was Champions. You could use anything but balancing the weapons technology will be difficult.

I did Physics at A-Level, but I've tried to simplify things. Hopefully no one will take exception to my bending some of the laws of nature so that the players can have fun rather than having to pass an exam.

GM's not familiar with the Hero System ${ }^{\text {TM }}$ may have trouble understanding a lot of the statistics given here. The brief summary may help on some of the basic points.

On all the basic stats humans average 10 and the normal maxima is 20 . Speed is a calculated stat and is average 2 to max 4 (again for humans) Speed is the number of 'actions' the character can perform in a 12 second turn.

Weapons generally do 1 point of body per dice of damage and the total of the roll as points of stun. Subtract any armour (or take off damage reduction \%ages) take what's left from the characters body and stun totals. Armour in the Hero System is split between Energy and Physical.

The whole system also allows specifying 'limitations' on powers such as 'only works against lasers'. Limitations reduce the XP cost of the power. This makes the system so flexible as to be able to stat up almost any power you could possibly think of. This is very useful for an extremely high tech 'everything is possible' type environment.

I highly recommend the Hero System. It comes in a number of flavours. I played 'Champions', the superhero genre for a long while and found it possibly the most brilliant system I've ever used (and I've tried lots of different systems!) If you want flexibility to do 'anything' Hero System is ideal. AD\&D is best if you want simplicity (IMHO), ShadowRun is quirky and fun for something different. Most other systems are a variation on these three systems. Here's a list of systems in order that I would recommend for playing this campaign:

Hero System (Champions)
Actually I can't think of any others I'd dare to try a 'Culture' campaign with !

## Time-lines

The EC calendar is calculated based upon standard periods determined from the background gravity wave originating from the big-bang. One standard period is approximately 22 years.

| Date | Wars | Social | Technology | Events |
| :---: | :---: | :---: | :---: | :---: |
| $27.87 \times 10^{21}$ |  |  |  | The big-bang (reference date) |
| 0 |  | Birth of the Hiadan civilisation | First recorded histories |  |
| 14421.5 |  | First recorded interaction between interstellar civilisations. | The Hiadan civilisation currently leads the field in technological developments. They have supralight speed vessels controlled by massive optical computer systems. <br> SC Optimum commissioned (Hidian research vessel 14428.6 14509.3)) |  |
| 62422 | Beginning of the commune <br> ....... TL~Nー ト........:1:......... | History records ...1.. - f.......... | Freezer storage -..nth~d~…:....... | Earliest DOB for Characters |


|  | attacks the coalition of Spindarks and Chiqows. The war is characterised by large scale use of artificial intelligence war machines. The cause of the war is unclear even from the start. It is widely believed that the war is fought over the ownership of a border system where an older civilisations technological relics are found. | faring civilisations. There is little interstellar trade or cooperation. | by some cultures. <br> GSV Finer Things commissioned (Hidian Civ) <br> GSV Immaculate perception commissioned (Spindark Folly ??) <br> GSV Worst of all cases commissioned (Chiqow Mil) |  |
| :---: | :---: | :---: | :---: | :---: |
| 62501 | End of the commune wars the Ne-hue civilisation is almost completely destroyed. The Chiqows place the Ne-hue home world in isolation. The Spindarks withdrawal from the interstellar community. | Fifteen races are known to engage in regular communication and limited trade. Most trade is in scientific data and star charts. | GSV Somebody calling (Spindark Hidian Civ) |  |
| 62514 |  | Founding of the Azmat Wickan on the planet Xaross III. | GSV Populous commissioned (Ne-hue Civ) |  |
| 62516 |  | Fall of the Ne-hue civilisation | Hiadan's invent PP communication <br> GSV Personal Indemnity commissioned (Hidian Civ) <br> GSV Populous broken | Loss of the Star system Trennidan (Destroyed by an unknown entity). |
| 62550 |  | The Spindarks leave their homeworld for an unknown destination. Their culture is lost? | PP communication <br> \& power transfer in use by EC <br> GSV Curious <br> Pastimes commissioned (Hidian Civ) <br> GSV Ends of Invention commissioned (Keetunkan Mil) | Hiadan civilisation GSV "Somebody calling" reports an unspecified nanite infestation. |
| 62600 |  |  |  | n............f. |


|  | conflict. Chiqows fight Keetunkans along the Nedar peninsula to prevent infected Keetunkan ships reaching the areas around the Chiqow empire. | and <br> communication militarises. This is the beginning of the era of silence. Ships operate on stealth rather than searching openly for contact. | commissioned (Hidian Mil) <br> GSV Immaculate perception destroyed by Chiqow) | nanite-plague becomes public. Panic ensues. A Number of small scale border wars erupts. Trade fails. |
| :---: | :---: | :---: | :---: | :---: |
| 62611 | The Copian conflict subsides. | Fall of the Hiadan civilisation | Hiadan 'Ship mind' technology becomes the common technology for large scale GSV type ships. | Retaliations and recriminations spawn increasingly large scale conflicts. |
| 62635 | The planet Raffel a colony world of the Chiqow empire on the Nedar peninsula is destroyed by plasmatic field carpet bombing. The Keetunkan fleet claim responsibility, but it soon becomes obvious that the Chiqow fleet allowed the Keetunkan incursion rather than deal with the situation themselves. | The Eelu brotherhood begins its work bringing technology to as many planets as it can. The cult raises many young civilisations to the brink of interstellar technology, but also infects a few systems with the nanite plague. | Virtual reality storage and RNA taping methods become the preferred methods of long term storage. <br> GSV No small <br> thing <br> commissioned <br> (Keetunkan <br> Colony ship) | The Chiqow ship 'Worst of all cases' suicides in an apparent religious experience. |
| 62654 | The independent Feenur fleet begins a short war with the Chiqow. The Feenur have no homeworld and have been living entirely as a spacefaring culture for centuries. Without the readily available resources of the Chiqow the Feenur are reduced to a few routed ships in less than 1 year. | There are calls in several federations for a combined embargo. | The Tekarr homeworld finalises its plans to transfer planetary government to a purpose built Mind. <br> GSV No <br> Conclusion commissioned (Tekarr Mil) <br> GSV Less-is-More commissioned (Feenur Mil) <br> GSV Likely-as-not commissioned (Feenur Civ) | The sun in the Keetunkan system Veridani becomes too active for the main habitable planet Pee-kut to remain lifesustaining. The population is evacuated over the next 2 years. |
| 62658 | Tekarr - Lanobarr assimilation <br>  | The Tekarr | GSV Tightrope | The planet Futkun <br> TT : $\sim \sim A 1$ _d ..... $1 \ldots$ |


|  | fight over ownership of the Vastor asteroid belt. The belt is extremely rich in volatile materials suitable for building up a space fleet. The war ends with both sides devolving an independent force run by shipminds designed to keep the peace. | the first independent embargo fleet. Others follow. | (Tekarr Indi) | extreme time pressure by the Keetunkan population evacuated from Veridani III |
| :---: | :---: | :---: | :---: | :---: |
| 62660 |  | Formal alliance of the Embargo culture <br> GSV Virtuous tangent launched as the first entirely un-manned vessel of war.. | GSV Contented commissioned (EC Civ) <br> GSV Virtuous tangent commissioned (EC Mil) | The Gull civilisation culls its infected ships and donates the remaining fleet of 16 cruisers to the EC. The Gull then put their home system and 5 colony worlds into isolation. |
| 62662 | EC forces Destroys the Yenadu orbital habitat found to have a nanite-infestation when its Merchant fleet flees the orbital in panic. |  | Artificial gestation begins to become popular in the EC. |  |
| 62664 | The Renabu War. Characterised by 'learning' difficulties for the EC ships. The EC sustain heavy losses. <br> The Pina War. Characterised by 'moral conflicts as the EC begins to realise its potential as a pervasive war fleet. EC losses are slight and mostly technology rather than organic life. <br> The Barra conflict. A small scale war fought by the EC against the higher technology of the aggressive Barra system. The EC wins though numeric advantage. <br> The Emman War. The EC is relatively well matched against the Emman system, but the EC have more vessels (in fact they only commit a small portion of the fleet.) The GSV 'Ends of Invention' proves to be masterful in its strategy through the conflict. | The EC pattern of social interaction settles down. | GSV Contented modified for Ultralong drive. | 100 years of embargo conflicts elapses and fades until Embargo forces achieve a solid military rule over interstellar space. |


| 62676 | The Nocoman Conflict erupts when a previously noninterstellar society of 7 planets try to emigrate from their home system. The conflict lasts 30 of the bloodiest years of the embargo. Finally Embargo 'suicide' ground forces destroy the shipyards and industrial complexes on five of the home planets. The Nocoman ceases to push its system borders. | The EC begins the Soldier breeding boom. | The remote weapons drone becomes a popular weapon. Borrowed from the Nocomans <br> GSV Sustainable potential commissioned (EC Mil) |  |
| :---: | :---: | :---: | :---: | :---: |
| 62681 | The Enurex conflict. The EC wins a small scale conflict mostly limited to strategic attacks on the Enurex industrial complexes. <br> The Kakarr War. The Kakarr after a long period of isolation decide that the embargo should end. They try to re-unite the dispersed parts of their civilisation. At the same time as the war they make many diplomatic overtures. <br> The single cruiser 'pointed argument' destroys half a dozen remote 'contact' probes and a manned recon vessel convincing the planet Parbouough to remain isolated. | GSV Ends of Invention elects to de-militarise even though it will remain part of the EC. |  | A few single planet conflicts a fought over the following 400 years finally tapering off to nothing. |
| 62740 |  | The Embargo culture advisory minds propose the de-militiarisation of the Embargo culture and the instigation of an inter-stellar assistance program aimed at rejuvenating the pan-stellar community. |  | GSV Virtuous tangent disembarks its passengers to 'contemplate' its future. |
| 62742 |  | De-militiarisation starts. |  |  |
| 62743 | The Chiqow invade the Esperi system. The system was previously owned by the Keetunkans, but the colony died off during the embargo. <br>  | The first 'Contact' units are formed in the EC. | GSV Sustainable potential destroyed by non-specify threat. |  |



## Background.

The characters are born-to or have joined the Embargo Culture an inter-stellar community that has until recently been responsible for preventing interstellar travel. The Embargo Culture was formed from a number of home
worlds of mostly human geni-types over 2000 years ago. The characters form the crew of a de-mobed star ship now switching from military duty to aid work. They are not part of a defined chain of command. The characters must act as ambassadors for the culture but will also have to set policy. The ship minds are not far away should the characters need advice, but the minds wants real people to make decisions, not act as dumb puppets. This is a general policy across the entire EC. The Minds coax the EC from behind the scenes (very effectively mind you !).

Two thousand years previously the Azmat Wickan, a coven, released a Nano-virus (Xix-ta-pico-mapi). This virus is capable of invading both nerve tissue and AI thinker architecture. Coven members are immune.

The ability to infect both machines and organic creatures gave the virus an unprecedented ability to spread. Together with the intent of the Azmat Wickan to spread the virus the only course of action was to close all borders.

The known galaxy now has to recover from the social and economic collapse resulting from the sudden loss of all trade links.

With the opening of borders old disputes may erupt and there is always the risk that some planets harbour hibernating viral strains waiting to be let loose to cause another round of disasters.

The EC is not Earth-centric but old Earth colonies will play a major part in the campaign.

The air of change about the ship is palpable. Space here is crowded. 100 Km to tall port of the "Steely glint" another GSV the "Finer things' lays peacefully basking in the solar glow waiting for SG to pull clear of the orbital. Conversation between the two ships drifted into idle chit-chat. Both were making modifications to their hull fields now that the de-mobilisation was official. SG's modifications were the more significant and more secret. Finer was trying to coax some hint out of SG after noticing the G-Mass-Moment around SG's stern suggested an increase in engine mass.

SG was maintaining that it had to do something with the spare mass and engines were the most politically correct thing it could do with the 2 million tonnes of 'war material' it was shedding.

Twinned pairs of sub-atomic pseudo-particles flickered with the banter completely inconsequential to the crew of the SS Ascending light. The SS Ascending light had itself completed a far more dramatic (at least it though so) change. The crystal membrane that formed its inner 'real' hull was still fractionally above the ambient temperature cooling down as it settled round spaces that had once held plasma acceleration weaponry. It could still hold its own in a fight, but no longer was it quite the same ship that it had been 18 months ago before it took its place in the maintenance bay of the Steely glint.

Ascending light or 'AL' was looking forwards to getting its new crew together. In many ways it would miss the immediate need of tactical information and desperate statistical guesswork of conflict. Still we all have to change and a mind like its own would undoubtedly be around for the next war.

Steely glint reached its determined parking zone and signalled Finer Things to go-ahead and move up for its turn docking with the orbital. Lots of people where changing ships, lots of ships were changing. There were street parties starting up around SG's urban quarter. For some this would be a last chance to visit favourite bars or meet friends before leaving the Steely glint for the orbital. A few people, mostly technicians were transferring to the Finer Things. Some who where going to live on the orbital had already left. There were arrivals too, many of whom had been waiting on the orbital to rendezvous with SG. SG was monitoring many of them looking for black sheep, outsiders on the inside.

One nearly black sheep and a Civ; Senior SO Corin Pedin and Abraham Vult shuffled their notes ready to give another de-mob briefing.

## The Embargo Culture.

The Embargo Culture (EC) are entirely space borne society. They live on artificially constructed space habitats and in huge travelling arcs capable of sustaining a near planet like environment. The EC is almost at the top of possible technological evolution.

In an environment where technology is so advanced almost all of the mundane work has been taken over by machines. Nearly all the things you could possibly want are available. The society is so prosperous so as to make work, trade and money obsolete.

Most humans lead a life of leisure or work part time in the few jobs not well suited to machines. Anything job with a clearly defined goal can be done by a computer. Humans work in the jobs with only vague definitions such as: Art, Exploration (inc explorative genetics research etc), Politics, Philosophy, War, Sociology, Systems rationalisation, Ethics, Knowledge engineering.

Computers have taken over repetitive jobs. The more critical tasks that can be clearly defined are given to the next generation of computers called 'Thinking machines'.

High powered Artificial intelligence computers (AI's) are categorised by capability into: Demi-thinkers, Thinking Machine or Thinkers, Super-thinker and STM's ?? (sentient thinking machines ). Most space ships are commanded and piloted by at least a Demi-thinker. The largest of ships the GSV's (General Systems Vehicles) are fully sentient AI's (STM's) easily capable of out thinking even a panel of humans.

The EC governance itself is mostly controlled by a co-operation of the GSV ship-minds. There is no central EC government. In times of crisis the entire EC population can be poled over mind-links and decisions are based upon a true consensus.

There are two classes of Human / Demi-human in the EC. The Players can choose to be one or other.

The population is split $60 / 40 \%$. The majority of the population are termed 'Un-therapied'. Un-therapied individuals have most of the normal human hang-ups. The EC culture has alleviated most of the common problems, but still un-therapied individuals can still suffer from jealousy, anger, and other destructive emotional problems.

Advanced psychology has given the EC the tools to help people deal with their emotional problems. Any distressing memories can be removed or the sufferer quickly given the ability to accept them with ease or indifference. Ultimately the ultra-modern tools of psychology can 'fix' any emotional or psychological injury. This is not the 'numbing' solutions offered by crude in-organic drug therapies, but the ability to have the person 'handle' the problem. What once took days of counselling to achieve can be done by a 'lace-analyser' in minutes.

The ultimate extension of psychological medicine is the ability to teach an individual to 'self-therapy' as and when required. Similar to a method of hypnotic suggestion, individuals while still feeling anger, fear or greed can simply control those unwanted feelings if they wish. Effectively a 'Theriapied' individual is given total control over their own emotions. The emotions are not removed. The individual would still feel 'hurt', but would not suffer except by their own choice.

By design all the STM / AI-Minds have the ability to control or suppress their emotions.

## Known Space

The areas of chartered space do not form a dense sphere with a boundary beyond which is unknown. Each of the space faring races extend themselves along the easiest navigable chains of stars forming corridors of known space. The area around these corridors may also be explored, but this still leaves huge areas of unexplored (and mostly boring) space between known space lanes.

Each of the space faring races have spidery nets of territory. These territories are interlinked with un-inhabited systems that are simply known stopovers between territories. There are no patrolled borders between the territories. There is simply too much space to patrol. The security of the territories is based around system defences that operate only in the known inhabited system. Patrol ships and automated recon drones occupy many of the adjacent systems to spot vehicles travelling the major routes, but nothing is likely to spot a determined invader using 'deep space' until it reaches it destination system.

Due to the nature of space warfare and the entangled proximity's of different territories warfare tends to favor the attacker. Conflicts tend to become wars of attrition rather than defensive. The embargo was thus different from military actions that had preceded it.

Some EC ships do take time-out to explore the vast regions of uncharted space between the space lanes. Generally this is time consuming and un-rewarding work.

## The Minds.

EC culture is guided if not controlled by a collective of High powered sentient machines. The EC culture itself supports a wide variety of 'sub-cultures' and the minds exert very little overt control over anyone not seeking it. By careful manipulation of the society the minds have created a culture where crime is nearly unheard of. Individuals within the culture are free to do almost anything they want. The minds using their immense intellectual power provide a society almost free of risk.

The minds can often object to an individuals actions, but generally unless very destructive to others even the most extreme individual actions and desires can be catered for.

Minds present themselves to the outside as the voice of the ship which might be considered their body. They can also construct any size or shape or number of automata called 'Avatars' to interact with the rest of the society.

Further the minds can store and generate artificial realities communicating straight to the human brain. These artificial realities can be used for games, training or entertainment. Many individuals can share the artificial reality, an occurrence commonly done for shared dreams.

If the need arises it is even possible to join an AI mind with an organic mind. This practice is uncommon except where a human might require communication with a mind that is beyond the capabilities of the spoken (or though) word. Mostly this means the practice is limited to controlling sophisticated technology whose control is too complicated for conventional means. This direct interaction is also used for some high-level research.

Therapied individuals are required to work directly AI's in this way. It would be possible to link an un-therapied mind to another mind, but without the control that therapy gives the effect could easily be similar to epilepsy.

## A few facts.

- Earth has been found to not be the source of all humankind.
- Radio wave radiation is harmful to organic life in the concentrations found in Earth's mid $20^{\text {th }}$ century.
- Genetics is not a simple code. Segments cannot be considered or modified without consideration for the entire chromosome.
- The EC has mapped the entire human genome (and most other races).
- Psychic abilities DO NOT EXIST. This is not a GM’s feint. There really is no psychic stuff. No ghosts, no mythical beings, no evidence of deities, no proof of the soul.
- The minds and drones beat organics in every respect. They are just plain better. No you can't play one (you don't have enough character points).
- GM food is a bad idea unless you have a FULL understanding of genetics.
- Life (GAIA) tries to be self regulating.
- There are simple life bringing proteins in interstellar space.
- Most of space is empty.
- There is a lot of space.
- The EC has seen a lot of space.
- A lot of weird stuff has been found that no-one has had the time or inclination to look at yet.
- Planets are easier to start life on than you might think.
- There is more unknown than there is known.
- There is no such thing as an unknown chemical/metal/compound.
- You don't get 'life forms made entirely of energy'.
- Anything that looks mostly human probably was once human.
- The computer is your friend.
- Fighting the genre annoys the GM.
- The GM has ALL the hit points he needs.
- An EC ship close to a star melts.
- All knowledge has a mean-time between collapse of 50000 years. After that the knowledge has generally been lost.


## Etiquette.

The EC holds personal freedom higher than any other concept. Although their lifestyle is one of almost complete hedonistic self indulgence certain social graces have become the norm. These social patterns are what gives the EC structure. Some of these social rules are listed here.

1. Be polite to anything that thinks.
2. Do things in-person where it is easy to do so.
3. If in doubt ask the ship.
4. Accept that the aesthetics of beauty are in the eye of the beholder. Different species find different things attractive.
5. Be especially nice to the host ship in which you live.

## Technology.

The majority of electronic equipment in the EC has been given some form of computer enhancement. Anything that requires some degree of skill to operate it has built-in enough automated assistance that an un-skilled person can use it.

Many items of equipment simply act intelligently, other items are equipped with a voice interface.
Most items that can be 'talked' to use a simulated personality to communicate with their owner / operators. The device can remember and recognise a number of people and share information with its surrounding devices.

The Simulated Personality Interface or (SPI). SPIworks, SPIface is the most common interface for most sophisticated equipment that does not itself require an intelligence.

The technology listed below is not an exhaustive list. It is shown to give an idea of what the players can stat for their characters and what they can expect to encounter in the game. Some defining limitations of EC technology are:

1. Point-to-Point (PP) communications and power relays are in short supply. Simply because the manufacturing process requires smashing sub-atomic particles together and waiting for the one in a billion chance that you get a twined-pair and that you identify that you get a pair and that you capture the pair that you made. The end result of this 'hit and miss' is that you can build a huge reactor and only get one PP pair every few years. The EC has built enough to get a fair amount of production, but they are still relatively rare and hence valued.
2. Fuel is easy to manufacture, but still has to be transported. It is still possible that you might run out of fuel unless you plan fuel stops.
3. There is no 'teleport' technology in the EC or anywhere else come to that.
4. Offensive weapons are more powerful than defensive shields. The winner of a fight is usually dictated by a chess-like strategy. In the milliseconds in which a fight is enjoined the weapons are fired, engines given manoeuvring instructions and patterns of destruction are set in motion. Brains almost always win, although physical size can overcome a lot of obstacles (Planets are simply too big to destroy).
5. It takes time to move information. Big ships can move information faster because they have more links to use.
6. Natural organic brain mass has intrinsic limitations on storage capacity and retrieval speeds.
7. Bigger is generally faster. At high levels of technology overall mass of engines is what determines acceleration.

## Communications Technology.

The ships and habitats which the EC inhabits for the most part can track people by sight and sound. Any message can be relayed vocally by the nearest mind or SPIface equipped device. Most people simply send verbal messages by relaying things to the nearest aspect of the ship and the ship will forward the message.

If a true conversation is required all the participants can agree to go to the nearest artificial reality. If the person is equipped with a neural-lace this can be done directly using short-range G-phase modulation.

Simple 2d video \& voice contact is available via the still common public terminals.
Personal mobile communications can either be a 'Tablet' the EC equivalent of a Electronic organiser or via long range $(300 \mathrm{Km})$ Lite-Encrypted FM Radio. Note that contact units will often carry a communications tablet that is made to look like (and sometime double as) an ordinary piece of equipment such as a pen or a bracelet.

Many EC citizens use an N-Lace or pass messages via the ship. Personal equipment can get lost and is a chore to maintain.

As a general rule of operation broadband communications (radio / microwave etc) in the EC use very low power transmitters and very high power receivers. This is why most communications is routed via a ship.

Communications tablets have a slightly longer range than N-laces. Normally 'ship to shore' communications via N -Lace or tablet allows orbital ranges. Larger vessels have sensors that can penetrate though planets to remain unaffected by 'dark side' problems.

## Transportation Technology.

Most of the EC population is resident on-board large interstellar ships or stationary habitats. The size of both ships and habitats requires transport around them. This is provided by Tube-cars, Flyers or a variety of 'entertaining' transports.

Tube cars run in Paired tubes. They are a public transport method. There are sufficient numbers of cars to ensure that you never have to wait for one. Once you step into the car the SPI face will ask where you want to go to and take you to the nearest tube. Tube cars can travel at near relativistic speeds without time dilation or uncomfortable G-forces. A Tube car can carry a party of 6 humans in comfort, 12 at a pinch and 18 with standing room only. The cars are always clean and travel at whatever speed seems appropriate given the passengers apparent haste entering the car and any stated preference. At full speed passengers are recommended to sit for the very short duration of the journey.

Flyers are used less frequently. They travel at a variety of speeds depending on make and model. Their speeds range from sub-sonic (max) to Mach 5(max). They can hover and have a full freedom of movement. flyers are equipped with a degree of anti-gravity and G-compensation. Flyers come in a variety of sizes most seating 2 to 6 people. Flyers are also public transport, but no fixed embarkation points except around ship-to-ship docking areas. Flyers will be sent by the ship if requested or if it feels it should take you somewhere point-to-point. Speeds above Mach 1 are generally not allowed in a habitat or ship because of the discomfort to some EC races caused by having high speed vehicles pass nearby. If a flyer is requested there is generally a 5 minute wait for one to arrive unless the ship was anticipating your need.
'Entertaining' transport covers everything else. For variety ships and habitats have other means of transport. Rural areas of the habitat or ship may offer mounted transport. Some Urban streets run with cable cars or Chair lifts. Just of the hell of it some places even have rick-shaws.

Outside the habitats the ships themselves come in a variety of sizes and shapes from Continent class GSV's to Light speed capable space-suits. Form is generally no limitation on function for EC starships. As a rule the larger the ship the faster its maximum possible speed. This assumes a normal ratio of habitable space - weapons sensors - engine. Starship speeds are generally in the order of 10 light years per day. Speeds above 1000LY per day begin to suffer from some relativity problems unless sustained for long periods of time. Generally you can expect to spend weeks travelling between systems. Most people in the EC think of weeks between destinations as a real chore. They will be used to jumping in a tube-rider and getting to their destination in seconds or minutes.

## Medical Technology.

Baring instant-death or major brain damage nearly all diseases and injuries are treatable in EC culture. Medical procedures for cosmetic surgery or even recreation are not uncommon.

Biological medicines have taken over from inorganic chemistry except where cold storage is a problem. These new drugs are much more in tune with the body's natural function. Drugs have no undesirable side effects. Inorganic drugs are used as a back-up only.

Sex changes or complete plastic reconstruction (with natural tissue or synthetic) is available and indeed routine. Memory supplements are common especially to assist those over 200 years old. rejuvenation treatments are readily available though painful. Immortality treatments are limited availability and very expensive to implement. Major physical alterations such as additional limbs are possible. Cybernetics are available as a bioimplants (poison ducts etc).

Life-spans even without rejuvenation tend to be upwards of 300 years.

Given the vast resources of the EC expense is only a minor issue however the EC (i.e. the MINDS) do not encourage anything that they cant easily sustain. Limiting immortality is an ethical issue. Most mature citizens of the EC think that 300 years is enough, wanting more is immature.

Implanted micro mechanical devices to assist in healing or administer emergency medical attention are also available. These mechanical aids are not often requires and as such are uncommon except with the few individuals who desire wantonly dangerous lifestyles.

Portable medical first aid unit have become very sophisticated. Taking most of the skill out of first aid, a portable Nano-doc can perform minor battlefield surgery.

The most sophisticated medical technology is Nano-symbiotic computers living and multiplying in a hosts blood (bloodwear / bloodhosting). These semi-sentient co-habiting computers can talk directly to the host's brain. To host bloodhosting is not entirely one sided NSC Entities (nancies) have rights under EC law. A person agreeing to bloodhost implantation has responsibilities for the NSC and both the host and the symbiot have some 'right of habitation' over the host's body.

Commonly implanted devices include: Contraception, Memory store, encyclopaedia memo-chip, Partial armoured skeleton, Bio monitor, Pain blocking, PA/PO chip, Time chip, Hormone control chip, Drug synthesiser gland (Calm, Alert, Sleep, Cheer, Boost).

On a fully equipped ship or habitat limbs can be fully regrown, any cosmetic changes can be made, any disease cured. Under full care a human can regain up to 5 body per day.

Vessels that are much smaller such as SDB's will generally have enough medical capacity to sustain a body and repair damage, but will not be able to clone new bodies or conduct major surgical alterations.

## Robot Technology.

A fully equipped ship can construct a device from the atomic level. Perfectly human looking robots are possible. Mostly however robot technology is used for un-intelligent construction robots, body guard or soldier robots and automated weapons systems.

The robot that military characters are most likely to have had significant contact with are called Chevrons. These are an intelligent robot usually with PP communications to a portable link or N-Lace. The Chevron is intended for use as a surrogate for command personnel. Initially the word Chevron was used to mean Rank, but Chevron surrogates are generally offered to military personnel of Rank. Chevrons with PP communication can take the place of their twinned officer in combat. They are equipped for real-time instantaneous feedback so that the officer can take part in the action without risk. The robot can operate independently on orders and can be used as a servant, bodyguard or sentry.

Miniature reconnaissance robots are also commonly available.
Where more sophisticated robot technology is used these will generally fall into the category of Drones.

## Power sources and Misc Technology.

The most significant component of EC technology is Point-to-point technology.
PP communication is the best method of communication. A sub-atomic particle can be split into two 'pixels'. The two pixels always mimic each other. Energy given to one is also exhibited by the other even if the two are separated by an infinite distance. There is no delay in 'transmission' within the 'clique'. This effect is due to string theory physics. The 'clique' is generally used for communication purposes. Some of the larger ships have switchboards to connect from one clique to another. Cliques can also be used for power transmission, but this is expensive and rare since the amount of energy that can be transferred across a single pixel is fairly small.

PP energy transfer is generally only used to power remote sensors deployed from a mother station.

PP equipment is one of the few limited resource items in the EC. Almost anything else short of large mass objects (such as ships and habitats) is available if you have a good reason to want it.

The EC has extensive use of Anti-Gravity, G-compensation, Fusion reaction, Field induction warp drive.
Force fields and mass manipulating fields are used extensively by drones and ships. This can provide a wide variety of function such as manipulating air molecules at limited range (blocking sound or providing flight). Mass manipulation can also be used to artificially strengthen structures made of very limited physical mass. The latter are sometimes called 'Structural Integrity fields'.

## Weapons Technology.

Ship to Ship.

Stealth and speed are the major weapons in ship to ship combat. Most ships are controlled by artificial intelligence's that make and implement the combat decisions faster than any organic life form could understand the situation. Communications delays and loss of communication due to ECM means that most combat is preprogrammed. All the likely outcomes are planned for and weapons systems and defensive measures are then set to perform an automatic series of actions. The opponent with the best pre planned actions generally wins. The
more weapons you have the more comprehensive your plan can be and the more redundancy you can build into the plan.

Once a ship has decided to engage in combat it can use any number of weapons:
Ultra high velocity munitions are available (UHVM's). These self propelled missiles are equipped with short burn super-lumnal drives. Usually warp drives rather than reaction mass driven. A UHVM will fly towards and through a target holing it and releasing lots of energy as it does so. Since stopping inside the target is not an option at light speed and timing an explosion to occur in the short time that the UHVM is inside is not possible the weapon only does kinetic and 'shock' damage. UHVM's are commonly fired in clusters to maximise damage. Effective range depends very much on the targets movement and sensors since most ships can evade a UHVM if they see one coming. Evading more than one is of course more difficult. The backwash effects from UHVM's make them inappropriate as man-portable weapons. Imagine a high velocity bullet from a jet fighter in a vertical dive hitting an anti-air missile fired from an express elevator.

Space attenuation weapons (SAT) operating on similar principles to a warp drive can tear a large mass apart. Smaller or more manoeuvrable ships can evade the damaging eddy currents by rapid violent manoeuvres. Space attenuation weapons also have limited range ( 100 Km ) and require large amounts of energy. Imagine that you are made of water and you're in a towel that someone is wringing out.

Direct energy weapons such as lasers, Plasma accelerators or kinetic / explosive weapons are also available in ship-to-ship magnitudes. The relatively slow 'Muzzle' velocities of these weapons means that they are only usable if the aggressor ship can match the target ships movement. Direct energy weapons generally have a range less than 10 Km due to the travel time of the energy. Imagine a leech with a welding torch just were you can't reach it.

Condensed anti-matter (CAM) is one of the most lethal ship-to-ship weapons. Anti-matter at atomic level is itself fairly destructive. A CAM weapon can construct 'grains' of anti-matter made up of thousands of molecules of anti-matter. Spread over an area CAM acts as a short term minefield capable of delivering near solar magnitude energies. CAM weapons cannot project their payloads at high velocity (limit $10 \mathrm{Km} / \mathrm{sec}$ in vacuum approx.). Imagine sand-blasting a flint statue with iron filings on a city-block type scale.

Meson weapons use a similar technology to plasma accelerators. Meson particles decay and release significant quantities of energy. By using real-space relativity to 'time' the meson decay the meson particles can be caused to decay at a fixed point at any distance. Mesons also being very small travel like gamma radiation though most matter and some defence fields. The damage can consequently be done direct to the core of the target. Imagine microwaving your head while wearing braces on your teeth.

## Heavy weapons.

Although combat other than ship-to-ship has been extremely limited vehicle and man portable weapons do exist in the EC culture.

Plasma field weapons are used to vaporise large areas. An extension of Napalm, Plasma field weapons use cluster munitions to deploy over a wide area. They then use controlled explosions to release large volumes of star-hot plasma. Similar in many ways to nukes, plasma fields weapons are designed to do more damage to a wider area more by heat than by a blast effect. Dispersal is normally via a ground or air launched multi-warhead missile.

Locusts are an equally mass destructive weapon, but designed for deeper ground penetration. Locusts are selfreplicating machines. They are dropped over a wide area and consist of a mixed bag of special purpose machines. The machines can burrow underground and hibernate until a pre-specified time, event or signal. The locusts than start manufacturing further tunnelling weapons from local raw materials. Robotic soldiers, mines, gas distributors and seismic nukes may all be manufactured to eradicate all targets within a specified area. Locusts also have the ability to re-hibernate and return again and again. Entire planetary cultures have been destroyed over generations by locust weapon systems. Locusts can be deployed from penetrator missile volleys
or personal demolition packs depending on the required size of the first wave of the attack. Locusts are viewed in the same 'morally dubious' way as mines.

Mini-Nukes are still considered the most efficient heavy weapons. A mini-nuke can be the size of a vacuum flask and destroy 8 Km radius with blast, heat and optionally sustained radiation. Mini-nukes are standard issue to small insurgent teams in most high tech civilisations.

Massive Kinetic weapons are the staple of space supported assaults. Cheap and effective. Guided cluster weapons with 'mass only' warheads are a relatively clean weapon. The profile of the weapon can be modified either for deep penetration or grazing (dust burst) impacts. These weapons usually come with some methods of target area designation to localise the effect. This allows the weapon a wide scope from single munition antivehicle strikes to multi-million warhead saturation stone rain.

Personal Weapons.
EC personal weapons are characterised by the built-in-skills. Most firearms are either self aiming or assisted aiming. Lighter weapons where there is no weight allowance for the gyro's or AG systems required for aiming assist tend to use guided micro-shell ammunition.

Personal weapons are sub divided into line weapons and support (normally called heavy weapons).

## Line weapons.

Slug throwers are the staple personal sidearm. Rifle and pistol configurations both exist. Most pistols are short barrel, wide bore weapons with explosive speciality ammo or guided mico-shells. Rifles vary much more in design. Often equipped with self aim or aim-assist rifles also vary in calibre. The main advantage of all slug throwing weapons over Lasers and Plasma weapons is the flexibility to change the payload effect.

Common slug thrower payloads include: Explosive tipped guided micro-shell, Memo-form tipped micro-shell, Spoiling penetrator, Soft-shell, Plastic RF sliver round, Hollow point Dum-Dum, Infector, Wire trailing, Penetrating guide point round.

One sub-class of slug throwers is the grenade launcher. Commonly fixed to the under side of long arms. Grenade launchers suffer double range penalties, but can be fired 'indirect' at ranges over half their maximum. The EC has standardised on 30 mm launcher propelled and 200 mm thrown grenades.

Lasers are can be powered by energy cells that provide high power electrical energy spikes to a laseing rod. Alternatively lasers can mix highly volatile chemicals and then inject them into a low-pressure lasing chamber. Lasers powered by volatile chemicals are far more powerful than electrically powered lasers. However carrying volatile chemical cells is inherently dangerous. The main advantage that laser weapons have is their multifunction capability. Lasers can frequently be tuned to less efficient, but invisible wavelengths. This makes them good as ambush weapons. It's also possible to turn down the power on lasers either to conserve energy, or to start fires or sterilise wounds.

Ship based lasers are more powerful still and generally operate by dumping fusion exhaust into a lasing chamber to generate the beam.

Plasma Rifles accelerate volatile gasses into a strong magnetic coil. The beam of exhaust gas is charged and fired along a oppositely charged path. Plasma weapons can deal huge amounts of damage in heat and radiation. Plasma weapons are possibly the most sophisticated man-portable weapons system.

Though less frequently used Gauss weapons do exist in the EC. These use a combination explosive and magnetic accellerant to project a slug at high velocity. Gauss ammunition tends to be simple solid slugs. These weapons rely on a very high rate of fire to make them effective.

The development of grenade weapons and heavier bombs has lead to multiple warhead weapons. Each submunition is frequently equipped with homing devices so that a simple cluster munition can deploy 30 or 40 personnel seeking mini-explosives. Variations include slow dispersal cluster grenades that release micro-shells at 1 second intervals as suppressive fire.

## Support weapons

Gauss weapons though uncommon as line-personal weapons do have some advantages as support weapons. Explosively powered slug throwers have limit on the physical length of the slug that can be efficiently accelerated down a barrel. Gauss spear throwers (AT weapon) do not have this limitation since the entire length of the bullet can be used by the propulsion system. Hence very heavy physical projectiles can be given a high muzzle velocity. Gauss spear throwers generally fire an explosive tipped round 10 mm in diameter and 600 mm in length. Recoil suppression is required for this weapon. The small end profile and large mass of the slug makes it ideal for penetrating vehicle armour.

Useful as a suppressive fire weapon RF wire throwers (Emplaced AP weapon) fire long filaments of sharp adhesive wire. Using a wire thrower an area can quickly be covered with a loose cloud of filament loops. Each filament has microscopic cutting barbs and small adhesive beads. Anyone stuck in a fire field is likely to cut themselves to shreds just by breathing ( a slow and horrid way to die).

The most effective support weapon is the Nuke. Nukes can be as small as Thermos flasks, not including deployment method. Most nukes are based around low yield isotopes to limit radiation effects.

The generic term for support versions of slug throwers is Assault cannons. With large calibre ammunition and longer barrels assault cannons deal more damage with better penetration.

## Automated weapons.

The EC also has access to automated sentry weapons and intelligent mine fields. These are useful as second line troops or first line defences. Generally intelligent weapons system are capable of visually recognising certain troops and allowing them trough. For more secure defence other more comprehensive identification methods may be specified.

Kinetic weapons are most flexible in terms of payload variations. Lasers are more easily defended against. Lasers are easily adjusted to various power levels. Plasma weapons are expensive (in ammo) to operate.

## Unavailable tech.

Psionics, Displacers / Teleporters, Magic, Inter-dimensional movement, Time travel, Matter creation.

## The society.

There is very little stratification of the social structure in the culture. There is no real 'money' and hence no wealth. People work for pleasure rather than payment. The culture is governed by minds. There is no elected structure of administrators or similar public figures. The culture is so dispersed and diverse that actors tend not to become famous. The only stratified segment of society is the military.

## Making a living.

Cafés serve food for free. Accommodation is plentiful, free and easily customised, to the occupants' desires.
There is no 'land' except that owned by the ship or habitat mind and so there are no areas of accommodation that are 'richer' than others.

In short a character does not need to earn a living. People enter a profession out of interest. Generally they try to make the job interesting and the work is simply another form of entertainment. Since anyone that is providing a service is doing so because they want to they are happy with the work. 'Rude' customers would simple be ignored since their money is not needed. As a result people tend to become habitually polite to those serving food or providing a service.

Ettan Beloa works in an open fronted bar / café on pico street in the urban sector of the GSV 'Curious pastime.' He was raised by his mother and her sister, both sculptors. He has never met his father who apparently is in the military and still doing fine. His tutor during his schooling years found him disinterested in most of the higher sciences. Only literature really caught his attention. After a period of playing the young buck after schooling he got bored with sport and hill walking. He still looks forwards to the occasional visit to habitats with mountain areas when the CP stops at one. When he was 27 a friend who ran the bar decided to move to a habitat leaving the bar to anyone who wanted it. Ettan requested the ship to let him have it and no one else had asked so Ettan took over the running. He has a co-worker Padra. She mainly likes to serve as a waitress while Ettan likes cooking a lot so when she's about prepares food and Padra does most of the serving.

There are some regulars in the café. His old tutor amongst them. His tutor is teaching a new group of students now. When she stops by Ettan likes to talk about literature and cooking, but his real interest is in the travellers whom he has never met before. Finding out their stories is his best treat.

On days when Padra doesn't turn up Ettan has found that turning off the lights at the front of the bar cuts the number of passer-bys who drop in. It also gives a more intimate 'after-hours' type feel to the café. The regulars know its still open and if a stranger comes by Ettan has more time to spend with them.

If Ettan and Padra don't want to work the ship keeps the café doors closed.
In Ettans time off he visits his mothers sister whom he thinks of as a second mother. His real mother has been travelling a bit lately. Sometimes he goes walking with a book.

Ettan has no particular plans for the future, but expects that one day someone will walk into the café and they will become friends enough to become a couple.

## Trade.

The EC still has a form of trade. Even though most things can be manufactured by the ship people still like to have 'originals' or antiques. Many people in the culture take up art in one form or another so there are plenty of art objects to be had.

Most trade is for favours. Mostly this is brokered via the ship. There is no organised system for this. If you want something that the ship cannot easily provide it may ask someone who 'owes it a favour' to provide it. In return you end up 'owing' the ship a favour. Favours are passed around between minds in the culture so you may be asked to do something for a mind that you've never met.

The minds are fair and don't usually ask for a favour that seems like too much hard work. You're also not obliged to do what the ship asks, but you never know when you might want something special for yourself.

In the same way Ships can end up owing favours.

## Entertainment.

Many people in the EC are into 'outdoory' pursuits. A lot of space is set aside on GSV's for open spaces, More so on the Habitats. Land area is not a limited resource though most GSV's do not have any palatial mansions with gardens.

Mountains are generally rare. Some of the Habitats have built mountainous areas, but there are many people looking forwards to visiting proper planetary mountain ranges.

There are large groups of people who play games of strategy or chance.

The highest level of such games is generally considered to be Evergance a game played with cards onto a 12 by 12 chequered board.

Theatre, singing, music all have their normal place.
Cinema has generally be replaced with Artificial reality stories.

Sex is generally easy to come by in EC society.

## Religion.

Both in the EC itself and amongst higher technology civilisations generally there is a diversification of religions. About $10 \%$ of EC members make at least some concession to a religion.

Faith 1: Bright bringers. This is a group of military academy students raised under the tuterlidge of Sazz Walenski. He is an enigmatic radical. He has trained units as ground troops. The only ground troops that the EC has. Ground work is almost suicidal since any contact with a planet found to have the virus would mean being abandoned. Bright bringers are indoctrinated so that they will remain loyal to the EC even if cut-off on a virus infected planet. Sazz is a right wing sympathiser. His followers are generally likened to the Zen-Samurai.

Faith 2: The order of the fallen. The 'O.F' believe that the civilisations that make up the known universe are all domed to failure and a fall into anarchy. They are preparing the way to save as much of the cultures as possible storing away what they can for the cultures who come after. They believe that by doing so the cultures may 'evolve' a culture that will learn from those that have gone before. They store away huge warehouses of technology and information. They have some caches that date back before the embargo. Many of the families of the order have instructions for re-establishing communications with their far flung memberships.

Faith 3: Brethren of the circle path. Members of this order believe in re-incarnation in a cycle that only ends with the universe. They spend their time trying to match up the people to their past lives, passing on histories and the responsibilities of the past lives to the re-born. The central church is on a planet that has had contact with the EC during the embargo. The brethren are divided between searchers and the judiciary. The former establish the where-abouts and histories of people performing a continuous censor of peoples actions and personality. When the information is collated by the central church they can inform the searchers to contact people who have been identified as re-born to pass on information. The judiciary are called on to enact justice against those who have sinned in their past lives and escaped un-punished.

## The Wars.

The history of the Embargo Culture is not a peaceful one. It is however characterised by extensive use of tactical advantage to minimise loss of life to the enemy. While the EC shows a great deal of remorse for it's actions it has possibly been the most beneficent enemy any other race has fought.

Since some of the characters may want to come from a background that had intimate contact with the wars this is a brief summary of the nature of each of the major conflicts.

62654 - The Feenur / Chiqow war.
The conflict began when Chiqow governance declared a 'no-fly' zone between some of the area's of space nearby, but outside of Chiqow habitation. These areas included one of the Feenur trade paths to some minor planets. Although the Feenur could have abandoned trade with these planets and withdrawn they decided to continue using the trade paths. The decision was made partly for humanitarian considerations since the smaller planet systems would certainly have fallen into chaos without Feenur support. Also it was argued that Chiqow should be disuaded from extending military dictates to areas outside of Chiqow controlled space.

Unfortunately for the Feenur they severely underestimated both the war readiness of the Chiqow and their willingness to use weapons of mass destruction. Feenur warships had only a couple of successful engagements with the Chiqow. While for the earlier months of the conflict the Feenur were able to perform a fighting withdrawl 4 months into the conflict a Chiqow battle group headed by the vessel 'When Avrada was burnt' made an advanced attack against the planet Delta Serpentis 3. This resulted in massive fatalities for the noncombatants on the planet. The planet was poisened and the Feenur fleet in withdrawl was forced to provide medical support to a planet that it had intended as a resupply point. The battle of DS3 has left the planet uninhabitable. The withdrawing Feenur forces were harried though the space around DS3 although the amount of fire power applied by the Chiqow fleet did not match that of the opening strike. Feenur losses at DS3 were more significant during the withdrawl than during the opening strike. The battle of DS3 is considered to be the battle that destroyed the Feenur as a self supporting space faring race.

The war continued for another 3 month with decreasing intensity until the Feenur collective formally withdrew from areas dictated by the Chiqow.

62658 - The Assimilation War.

The Assimilation war was fought in the Vastor asteroid belt. The belt itself is thought to be the remains of a group of partially formed solar system where several of the larger planets in each system suffered destruction from an unknown origin. The system is littered with large deposits of heavy materials. The cause of the systems destruction is uncertain, but investigations have identified that the destruction seemed to have occurred in all of the systems at around the same time.

The Vastor asteroid belt was exploited by both the Tekarr and the Lanobarr civilisations. The operations of both civilisations had been ongoing for several hundred years. During this time a steady rise in piracy went mostly unchecked. Tekarr based pirates would raid Lanobarr and vice versa. Despite some initial co-operation between the two governments devolved local authorities started some small scale retaliation.

The scale of conflict escalated drawing in the primary military of both civilisations. The conflict continued for 4 years at very low intensity. Most of the action was confined to attrition of the civilian / pirate fleets operated by the other side. Finally logistical difficulties for both sides forced a truce with the formation of the Independent Vastor Protectorate. The IVP is created controlled by ship-minds with independence from both Tekarr and Lanobarr civilizations.

As a footnote after the conflict ended the piracy still continued, but the IVP presence policed the area without bias. Since the assimilation war ended 5 'de-biased' ship minds have sublimed (exited / transcended normal space-time).

62662 - Yenadu.

Yenadu is considered one of the most guilt ridden of EC conflicts. The conflict was rather more of a police action than a war. Most of the casualties were from civilian vessels destroyed while trying to escape from a
quarantine of the Yenadu orbital habitat. The habitat possessed several warships and a number of civilian vessels were armed. Lack of communication, partly due to nano-viral infection prevented the Yenadu vessels from appreciating how tight the embargo fleet had secured the system. Also it is presumed that certain of the vessels would have tried to run the blockade even with very slim chance of escape.

Yenadu was completely destroyed 18 hours after the start of the exodus when critical systems failed on the habitat and the mega-structure collapsed. Only 5 ships out of approximately 100,000 Yenadu vessels were able to survive the conflict. The vessels aborted their escape attempt and remained quarantined for 3 months before being remotely refuelled and escorted to an uninhabited system. The vessels were: "The merchant of venice", Lonely vixen, Invisible light, The splendid and Valley forge 8.

62664 - The Renabu War.

The Renabu colony consisted of 18 systems in relatively close proximity. Three of these systems had a full ship manufacturing base. The colonly was relatively young and dynamic with a large industrial infrastructure. Large portions of the societies utilised robotic constructs to do the heavy labour.

The colony used a large number of starships running an extensive transport network between the systems for trade and travel. This was the main cause of the Renabu colony being in a strong position against the EC.

The Renabu colonly was controlled by Govoner Rachel Lindsay. Lindsay had a hobby of wargaming and was able to rapidly militarise the systems. The degree of automation allowed a rapid turn-around in production to manufacturing armaments that were retro-fitted to the space fleet. When EC ships arrived in Renabu space in 62664 they were met with unpresidented resistance. Early subterfuge and extensive planning gave Renabu an upperhand. The early part of the war was characterised by lightning strikes of Renabu SDB's against EC flanks and support vessels. Blockades on the main planets of the colony had to be withdrawn several times when Renabu battle groups attacked EC assets far out of system. EC casualties were very high particularly amongst civilian vessels that had thought they were far from the areas of conflict.

The EC eventually won by destroying enough of the Renadu fleet over the course of the 4 year war that the fleet became unviable. Renadu casualties were almost entirely automated systems and military personnel.

62662 - The Pina War.

## Ships:

## Character Building:

Azz-bak Sizzurn pushed the flowering builder pod flush against the room's aft bulkhead. Soft nurturing limbs of sweaty black nano-masses billowing outwards from the core of the pod. The limbs would soon collapse opening the inside of the pod to the cabins temporarily heightened warmth and humidity.

The ship a cut down Danten cruiser was swimming hard against the backwash of the GSV falling astern. Azzbak Sizzurn could feel the micro-gravity modulations flickering at the corners of its sensor, not quite dampened out by the ships compensation field. The ship "Heightened anticipation" was making a show of its acceleration away from the GSV doing half of its Delta-V-Max.

There was a slight sucking noise as the pods limbs recoiled slowly in unison the damp pink and still hairless body. Very immature thought Azz-bak Sizzurn, to request a re-birth so natal.

Delicate blue eyes opened, lids beading with the pod residue.
Azz-bak Sizzurn started to compute exactly the best way to explain its failure to detect the Tussid's Nuke to Kameron. 'Bugger that!' said Azz-bak and decided that absence was the better part of valour.

In the Embargo culture a characters origin is a matter of player choice. It has no affect on the characters future development. For aliens the options may vary. The options are:

Characters can be: Human, Demi-human, Alien. The old war has just ended. Characters can be De-mobbed military or civilians. It is possible to play characters from non-EC races that are being brought into the EC, but this should not be the norm. Characters cannot be mechanoids though they may have cybernetic implants.

Characters are likely to be at least slightly religious. Spiritualism is popular in the EC since its one of the few areas where organics can draw a distinction between themselves and machines.

## Freeborn Human.

The character has two parents. The parents can be of either sex, but at the time of birth at least one must have been equipped with the correct organs to give birth. Giving birth in the Embargo culture is a risk free and optionally a pain free experience. The consciousness of the child can be raised or lowered if desired. Most parents choose their child to be born at least vaguely aware of the experience.
$20 \%$ of normal humans are sterile.

## Clone Offspring.

Cloning is relatively rare as a method of being a child into being. The clone need not be an exact copy of the single parent. From the same basic DNA a male or female clone can be conceived. Other attributes such as hair and eye colour are also available to change. More than this and the child should really be considered to be genetically constructed rather than cloned. Clones can be brought to term either in a womb (not necessarily belonging to the parent) or in an artificial gestation pod.

## Genetically Constructed.

Genetic construction can start with cloned DNA or built from a fractal RNA re-construction. Genetic construction is fairly rare. There is little point in making an artificial human unless the offspring is significantly modified and this is usually best done by elective surgery on a willing adult. Genetically constructed children often require special upbringing to avoid psychological damage.

Because of the gross variations Genetically constructed children are invariably gestated artificially.

Demi-Humans (Human sub-species from batches of similarly genetically modified humans) Are $60 \%$ Sterile. Demi-Humans are 99\% unable to interbreed.

Genetically constructed humans are $80 \%$ sterile (unless constructed as mothers !).

## Alpha / Beta Cloning.

AB Cloning is effectively the same in practice as Clone offspring. The major difference is the application. It is possible to store codified genetic samples with an RNA memory-wire. From this 'Shadow' the donor can be recreated. The majority of Embargo culture people has a shadow taken and keep it uptodate regularly. The RNA memory wire takes about 1 hour to make. The DNA sample need not be repeated. From the Shadow a completely new body (an Alpha) can be constructed in an artificial womb taking 4-9 months (depending on the size of the body). A clone of a Alpha would be called a Beta.

Alpha-recloning is limited by the embargo council to 4 re-clonings unless the estate can prove reasonable competence. Then the limit can be extended to 6 . Military personnel generally have 6 allowed with exceptional personnel being awarded extra lives.

## Artificially Gestated.

For a variety of reasons natural parents may decide to have all or some of the pregnancy removed to an artificial womb. The child may be raised ex-utero for any part of the term. Generally the parents will be present at the birth.

Playing a clone.
If a character dies the GM may allow the player to continue playing the characters Clone. In this case the Clone begins play at the full character point of the last Shadow recording. However the clone receives only half of the normal experience until a number of experience points equal to the clones starting XP's is reached.

It is not guaranteed that that the player may continue with a clone. Playing the clone is at the GM's option only. As a rule of thumb the player can run a clone if a) The original character died as a result of game-mechanics or a failure of the GM to read the rules or b) The Shadow recording is very up-to-date so that the player does not know more than the clone.

## Character History.

Human age bands. (Real age)
Childhood Ages 5-10
Teenager Ages 11-19
Young Adult Ages 20-30
Adult Ages 31-100

Mature Adult Ages 101 - 200
Old Ages 201-300

Very old Ages 301-350

Ancient Ages 351+
At any time during the background generation you can elect to be put into Stasis for any period of time.

For each period roll a 'Feel' for the period.

| Roll 1 | Roll 2 | Roll 3 | Feel result |
| :---: | :---: | :---: | :---: |
| 1-3 | 1-3 | 1 | All that glistens is not gold. |
|  |  | 2 | Never a dull moment. |
|  |  | 3 | Tempus Fugit. |
|  |  | 4 | A stitch in time save nine. |
|  |  | 5 | There, but for the grace of god go I. |
|  |  | 6 | Adversity breeds strength. |
|  | 4-6 | 1 | Things Change. |
|  |  | 2 | Love is the sweetest thing. |
|  |  | 3 | Serpents in the garden. |
|  |  | 4 | The burning bush. |
|  |  | 5 | There are more things in heaven and earth. |
|  |  | 6 | All things come to he who waits. |
| 4-6 | 1-3 | 1 | Those who can, do. |
|  |  | 2 | The candle that burns twice as bright burns half as long. |
|  |  | 3 | Pennies from heaven. |
|  |  | 4 | Never do today what you can do tomorrow. |
|  |  | 5 | My enemies enemy is my friend. |
|  |  | 6 | The road less travelled. |
|  | 4-6 | 1 | To err is human. |
|  |  | 2 | Do unto others. |
|  |  | 3 | Chasing the dragon. |
|  |  | 4 | Storm in a teacup. |


|  |  | 5 | A rolling stone |
| :--- | :--- | :--- | :--- |
|  | 6 | Between a rock and a hard place |  |

Points.

Base $50,+50$ disads, Max 25 disad points per category.

Special Disads:

Rather than buy skills with any IIF type focus limitation implants are far more subtle and difficult to remove. Instead use either or both of the following physical limitations. These also count as a distinctive feature (not bought as a separate disad!).

Physical Limitation: Artificially Enhanced - Physical body only (5)
Physical Limitation: Artificially Enhanced - Mental stats and Skills (5)
Physical Limitation: Therapied - The character never looses control [difficult to play] Common, Slight (10)
A note on technology skills:
Tech level on a character DOES NOT allow the character to use lower tech without penalty.
Standard tech requires a tech roll to establish how well the tech's hardware can be used.

Every-man skills: Conversation, Deduction, Paramedic, Shadowing, Stealth, T-fam Tube rider, 4 points Standard Language, AK: Home orbital, GSB or GSV, 1 Point PS skill, KS:F-Level Tech

Knowledge Skills List:
A-Level Tech, B-Level Tech, C-Level Tech, D-Level Tech, E-Level Tech, F-Level Tech, G-Level Tech, AI programming, EC Law, Ships Regulations, Security procedures, Data analysis, Leisure pursuits, Religion, Black market, Underworld figures, Nobility

Area Knowledge:
The Galaxy, The Rim, The Core, The Kalmacht arm, The Aboran arm, Embargo sectors, Mastrim Habitat, Cloneckt Habitat, Rasboen Habitat, Xiam City Habitat, Donnel Habitat, GSV Ends of Invention, GSV apparent victor, GSV undeniable conclusion, GSV No small thing

Professional Skills List:

Therapist, Ships Officer, Engineering, Communications, Scanning, Piloting, Comp Maint, Ground troop, Security, Recon, Teacher, Priest, Villan, Noble, Socialite

EC Languages: Standard, Malijjir (Cannot be spoken by humans, No written form), Thieves cant, Esquilidad (Religious tongue like Latin), Karcan (Technical language of AI's), Battle language.

Martial arts can be bought as Zero-G for plus 2 points on each technique.

## Sciences:

Particle Physics, Xeno biology, Genetics, Social-matha-mechanics, Meta-maths, Information theory, Ergonomics, Superstring theory, Nano-technology, Bio-chemistry, Field mechanics, Stellar mechanics, Orbital mechanics, Planetary sociology, Spaceborne sociology, Biomechanics, Communications technology, Weapons technology, Defence technology, Agricultural technology, Cybernetic technology, Electronics, Optronics.

## Arts

Sculpting, Singing, Acting, Painting, Video editing, Simulation, Massage, Creative writing, Building, Drugengineering.

Weapons familiarities:
Plasma, Slug throwers, Lasers, Assisted firing, Grenade Launcher, Throwing, Automated weapons, Ships weapons.

Transport familiarities:
Boats \& aqua-Ships, Flyers, Wheeled Ground vehicles, Aeroplanes, Hovercraft, rotary winged vehicles, Ground effect vehicles (GEV's), Submarines, Space-suits, Horse, Large space vehicles.

Other useful skills:

Planetary navigation, Orbital navigation, Land navigation, Sea navigation, Air navigation, Planetary space navigation, Interstellar navigation, Culture etiquette, Contact etiquette, Malijir etiquette, Chiqow etiquette, Culture psychology, Chiqow psychology, Malijir psychology, Feenur psychology, Tekarr Psychology.

## Character classes:

Packages: Therapist, Ships officer, Ships crew (specialise), Ground troop, Intel-sec, Scientist, Explorer, Entertainer, Maintenance crew, Resource extractor, Spec-ops, Mil-recon, Educator, Civ, Priest, Villain, Basic Ed, Cortical induction learning, Technical studies apprenticeship, EC Mil-ed, The faithful college of the enlightening order.

Therapist: Therapists have two main functions. Firstly they educate others in the methods of self help and stress relief that allow them to lead full healthy lives. Secondly they oversee the neural re-masking treatments that often form part of the cure for ill-adapted behavioural afflictions. To become a Therapist the candidate character must have undergone a Technical studies apprenticeship in a social science field. Therapists must themselves be threapied OR pay the full cost of the package skills without the package bonus. The package takes a minimum duration of 3 years training (Good professional term).

Benefits: PS Therapist 11-, KS Neural architecture 8-, KS Neuro re-masking surgery 8-, Conversation 16-, Deduction 15-, Psychology 12-, Package bonus 3 points

Ships officer: SO's serve military terms on ships with lower grade AI's. Usually involved with patrol missions. Their job is to oversee the crew and minimise risk to the crew while trying to maintain the embargo. To become a ships office the character must have spent more than one term in the military. Or may be therapied and spent one term in the military.

Benefits:PS:Ships officer 11-, KS: Ships procedures 11-, KS Ships weapons 11-, Persuasion 14-, Oratory 11-, Tfam: Space ships, Package bonus 2 points.

Ships crew (Commander): Ship commanders oversee the ships flight. They act as both navigator and pilot as required. To be a ships commander the character must have spent a term in the military.

Benefits:PS:Ships command 11-, Interstellar Navigation 12-, KS:Galaxy 12-, KS:Local region of space 14-, Pilot 12-, Tfam: Space ships, Package bonus 5 points.

Ships crew (Engineer): Engineers act as damage control personnel, they advise on modifications and work with the SO to determine what the ship can and cannot do. As well as overseeing technical repairs and modifications the engineers main duty is tactical advise to the SO. To be a ships engineer the character must have spent a term in the military.

Benefits:PS:Ships Engineer 11-, Tactics 11-, Engineering 11-, KS:Ships weapons 8-, Tfam:Space ships, Package bonus 2 points

Ships crew (Weapons officer): Weapons offices are primarily concerned with weapons tactics. They pick targets and match weapons resources to those targets. They advise the SO on distances and evasion tactics. To be a weapons office the character must have spent two terms in the military.

Benefits: PS:Weapons officer 11-, KS: Ships weapons 14-, Tactics 11-, Wfam:Broad group (Ships weapons), Fluent with Battle language, Package bonus 3 Points

Ground troop: Ground troops are rare in the EC military. They are mostly used as boarding crew, even so not only do they risk getting killed in boarding actions, but also being abandoned on virus infected ships or planets. To be a ground troop the character must have spent one term in the military..

Benefits: PS:Trooper 11-, AK:Standard ship layout 11-, Desert Survival 11-, Arctic Survival 11-, Jungle survival 11-, Wfam 1 personal weapon, W fam 2 support weapons, Fluent with Battle language, +1 Range skill level with all attacks, Package bonus 5 points.

Intel-sec: Internal security was initially set-up when the first EC forces where coalecessed. They have been a shadow background force during the entire of the EC's existence. Now as the EC begins to interact with other civilisations again Internal security is again becoming an issue.

Benefits: PS:Security 11-, Shadowing 12-, Stealth 12-, Wfam 1 personal weapon, Resistance, Fluent in 4 languages minimum, Perception 15-, KS:Security 11-, Package bonus 5 points.

Scientist: Scientists are driven by curiosity. They seek knowledge for its own sake. Scientific discovery is also one of the few areas where Organic minds are better than most computers. The Sentient minds are however still a match for humans even in this endeavour. Scientists also regularly have hook-ups with Thinkers and STM's to assist in their research. Long exposure to direct links however does have a tendency to change people. Scientists Must have spent at least one term either in Basic ed, as an educator or using direct cortical learning.

Benefits: Scientist, 1 Science 15-, Int 18+, Deduction 11-, Conversational Karcan, Package bonus 1 point.

Explorer: Explorers either travel within the culture or try to find EC ships travelling to uncharted areas of space.
Benefits:Traveller, AK:Galaxy 11-, AK:General GSV design 11-, Perception 12-, Package bonus 1 point.

Entertainer: Entertainers are characters who have elected as part of a professional term to provided entertainment to others. This may be in any one of a number of forms. Entertainers are not often famous. Since they are unpaid. They do it for sheer pleasure.

Benefits: 2 creative skills, Package bonus 1 point.
Maintenance crew: A significant portion of EC society enjoys working with the technology. Many of these people volunteer for work in docking bays. They service and maintain vehicles and equipment working closely with automated equipment. To get on the maintenance crew the character must have been an engineer for a term, or undergo a term of cortical learning or have a technical apprenticeship.

Benefits: Engineering 11-, Conversational Karcan, PS:Mechanic 11-, KS:Ship design 11-, Electronics 8-, Package bonus 4 points.

Resource extractor: Generally the EC is fairly densely populated. As a response more to this than a need for human staff the EC has 'miners' These people spend long periods in the nearly deserted regions of space mining and refining volatile chemicals and metals. Spending a term as a resource extractor is really spending a term with a bit more privacy and solitude than usual.

Benefits: Mining 11-, PS:Miner 11-, PS:Mechanic 11-, KS:Local area 12-, Package bonus 3 points.
Spec-ops: There are a few people in the EC who though a complex weave of fate despite the best attempts of society turn out to be mal-adjusted. People who are not and cannot be happy with the idyllic existence of most of the EC. These people are suited to and apt to enjoy working for Special-operations. Spec opt characters accept the need to break the moral code where the greater good is served by the lesser evil. Special ops character must not be therpied (and are unlikely due to their nature to ever agree to be therapied).

Benefits: Wfam Personal weapon, 12 Points in martial arts, $2 x$ Tfam, Linguist, Cramming 11-, Stealth 13-, Concealment 12-, Paramedic 11-, Tactics 11- Interrogation 11-, Package bonus 4 points.

Mil-recon: Military recon is a combination of insurgency work and remote surveillance. The work involves working closely with Ships officers and Ships minds.

Benefits: Tactics 15-, Surveillance 12-, Perception (Sight) 13-, Deduction 12-, Chartography 8-, Politics 8-, Package bonus 3 points.

Educator: Although the EC encourages self-driven learning childhood education is still guided by a tutor. Although a computer may know the subject matter experience has shown that the personal touch of someone from the same race helps retention of information.

Benefits: Psychology 13-, Teaching 11-, Cramming 11-, Persuasion 11-, Oratory 8-, Conversation 11-, 1 science 11-, Package bonus 2 points.

Civ: EC communities are heavily manipulated by the ship minds. Community team building and massentertainment are a big part of the system for maintaining a peaceful happy society. Civ's are the people who organise the street parties and plan the themes that go into making life interesting for the population. A Civ is almost a professional socialite.

Benefits: Psychology 8-, Persuasion 14-, Oratory 11-, AK: Home ship 14-, Linguist, Well connected, Package bonus 3 points.

Priest: There are a wide variety of religions in the greater interstellar community. The EC has fewer than most with a significant portion of the population being agnostic.

Benefits: Distinctive feature: Priest- Easily concealed-Noticed \& Recognised, PS:Priest 11-, Persuasion 11-, Oratory 14-, KS: Own religion 11-, Package bonus 1 point.

Villain: Villains are very very rare in EC culture. There is in fact no police force due to the lack of crime. Villains are most likely to be recently brought into the EC and not yet found out. Villainous implies untherapied.

Benefits: Distinctive feature: Villain- Easily concealable Minor reaction; PS: Criminal 11-, Concealment 14-, Wfam Personal weapon, Package bonus 1 point.

Basic Ed: Basic education is available to all children in the EC and nearly all children take all the basics. A basic education term gives all the background skills. If taken as a term the following additional benefits accrue

Benefits: Fluent any second language, Physics 8 -, Organic chemistry 8 -, 1 Sport 11-, Mathematics 12 -, KS:SPI Face 8 -, Biology 8 -, Ecology 8 -, Sociology 8 -, Package bonus 2 points.

Cortical induction learning: If a character needs to reach a high standard in a limited skill set the learning can be implanted using chemical induction.

KS @ 14-, PS @ 15-, 1 related Science, language or general skill @ fully fluent w/accent or 15-, Package bonus 1 point.

Technical studies apprenticeship
EC Mil-ed
The faithful college of the enlightening order.
Common Enhancements / Powers.

- Self control Elemental (Any number of appropriate points).
- Sex change at will: Shape shift (10 points), Zero End (+1/2), Persistent (+1/2), Invisible power effect $(+1),(30$ Active points), Extra time 1 Season ( -5 ), (5 Real points).
- Endo-Armour: 5/5 Armour (15 points), Double hardened (+1/2), (27Active points) (27 Real points)
- Enhanced perception: +5 All sensed ( 15 points), +5 Sight only (10 points), ( 25 Active points. Allowed in Elemental Control!)
- Microscopic Vision (3 points)
- Telescopic sight: +2 to offset range penalties (3 points).
- Stasis technique: Life support breathing (10 points) 1 Charge lasting [up to pre-set] 5 minutes ( $-3 / 4$ ), (6 Real points)
- Immunity to disease (3 points)
- Neural-Lace or N-Lace: Mindlink to Ships Minds (10 Active points) Only when supported by ships system ( -1 ), ( 5 Real points). Note that ships can generally 'break-though' for emergency messages and hence use Telepathy.
- Neural sub-processor: 3 point VPP, No skill roll to change $\{+1\}$, Only change when accessing an implant module $\{-1 / 2\}$, Only for languages and skills $\{-1 / 2\}$. (4 real points)
- Neural piggy-back processor: Skills multi-power. 11 point pool. Skills in 5 point slots, 11 point ultras or 11 point slots. Cannot be used for levels on existing skills. Slots can be changed with access to an implant module.
- Gland modifications: 30 AP multi-power. All powers take 6 segments to turn on $\{-3 / 4\}$. Drains the power 3 d 6 recover per 6 hours $\{-1\}$, All benefits fade as power recovers $\{-1 / 4\}$;
- Calm: +6 ego levels. Only to resist fear or help self control $\{-1\}$, Multi-power limitations $\{-2\}$
- Alert: +5 Perception all sensed, Multi-power limitations $\{-2\}$
- Boost: +1 Speed, +10 stun, +5 con (All linked), Multi-power limitations $\{-2\}$
- Sleep: Available on special effect
- Cheer: Available on special effect
- Wound mites: 1 d 6 Minor transformation cumulative $\{+1 / 2\}$ to repair wounds and impairments, Zero end, persistent $\{+1\}$, triggered by wounds $\{+1 / 4\}$, Continuous $\{+1\}, 27.5 \mathrm{AP}$, Zero range $\{-1 / 2\}$, Self only $\{-1 / 2\}$, Always on $\{0-$ No disad $\}, 1$ roll every 5 hours $\{-11 / 4\}$. (11 real points)
- Neural block: +15 levels of resistance ( 15 real points)
- Bio-Monitor: Detect bio status @ +4 perception 11 points, Discriminatory +5 , Self only $\{-1\}=8$ points. +2 Sense - Only for pre-defined 'trigger' warnings $\{-1 / 2\} 1$ point (10 real points total)
- Bio-control: 1d6 Minor cumulative $\{+1 / 2\}$ transformation, Limited class $\{+1 / 4\}$, Zero end $\{+1 / 2\}$, Fully invisible $\{+1\}$ 16.25 AP, Zero range, Self only $\{-1\}$, only to change by conscious effort things that can change automatically $\{-1 / 2\}$ ( 5 realpoints $\}$

Implanted weaponry. Usually concealed hence no focus limitation. Poison ducts, Acid release glands, enhanced strength.

Extended senses. Low light, UV, IR, High range hearing, Sonar.

Implanted defences. +Body (no secondary stats $-1 / 4$ ). Regen 1/Day Costs end, visible power effect

Triggered 'dead-man' offences.

## Alien Races:

Malijiir - $8 \mathrm{ft}-10 \mathrm{ft}$ Hairy, Clawed, Carnivores. Avg intelligence, Bi-pedal with a tendency to become quad when running fast. Lots of endurance, V. strong. Difficulty speaking standard. Tendency to eat in combat. $\mathrm{O}_{2}$ breathers. Malijjir are not easily capable of fine manipulation. They probably would not have achieved the level of development required to voyage into space if not for interference. Their history does not detail the patron race, but it is known to have existed and been roughly humanoid. They tend towards violence and are generally disparaging of humans. The female of the species is dominant, but does not associate outside of its own species.

NCM is recommended for Malijjir.
Adult NCM (Worth 3 points): STR 30, DEX 16, CON 30, BOD 40, INT20, EGO 15, PRE 30, COM 15, Pd 12, Ed 12, Spd 4, REC 20, END 100, Stun 60, Run $8^{\prime \prime}$, Swim 3".

Old NCM (Worth 4 points): STR 35, DEX 10, CON 30, BOD 40, INT 10, EGO 10, PRE 30, COM 15, Pd 11, Ed 11, Spd 4, REC 15, END 100, Stun 50, Run 7", Swim 3".

Ancient NCM (Worth 5 points): STR 30, DEX 7, CON 35, BOD 40, INT 5, EGO 10, PRE 35, COM 10, Pd 10, Ed 10, Spd 3, REC 5, END 100, Stun 50, Run 6". Swim 2".

Other requirements.

Ancient Malijjir should also take the disad Berserk when disturbed from sleeping Common 11-, Recover 11worth 20 points.

Old or Ancient Malijjir should take the physical limitation: Sleeps deeply, Frequent, Slight worth 10 points and a Psychological limitation: Sleepy, common, strong worth 15 points.

Minimum 10 AP Growth [x4 Mass, + 10 STR, - 2" Knockback, + 2 Body, +2 Stun, -1 DCV, +1 Per against] Always on, Zero Endurance, Persistent.

Minimum stats: PRE 15, Pd 5, Ed 5, END 30, Stun 30
+2 HAs Inobvious, Inaccessible Focus - Claws
$\underline{\text { Shedenpoar }}-6 \mathrm{ft}$ black, smooth skinned reptiles. Poisonous bite and spit. Strong but slow. Lower than average intelligence. Quadrapedal. Good at imitating sounds. Breath $\mathrm{O}_{2}$ Good tolerance to heavy concentrations of sulphur dioxides. The Shedenpoar are limited by their requirement to hibernate for long periods. In their natural environment they hibernate for 18 Months then wake for 7 months. In dense communal groups they can stave off hibernation for socialisation. Shedenpoar naturally change sex in the company of others of the same species. The less dominant $2 / 3$ of the population become female. Shedenpoar are egg layers. The eggs are laid externally, but
then carried in a pouch by any un-encumbered female. With some difficulty they can support their weight on two legs and a tail.

NCM is recommended for Shedenpoar.

Adult NCM (Worth 20 points): STR 20, DEX 15, CON 20, BOD 25, INT 20, EGO 20, PRE 20, COM 20, Pd 6, Ed 6, Spd 3, REC 8, END 100, Stun 60, Run 10", Swim 10".

Old NCM (Worth 25 points): STR 15, DEX 15, CON 20, BOD 20, INT 20, EGO 20, PRE 20, COM 20, Pd 4, Ed 4, Spd 3, REC 6, END 60, Stun 50, Run 8", Swim 8".

Ancient NCM (Worth 30 points): STR 15, DEX 10, CON 15, BOD 20, INT 25, EGO 20, PRE 15, COM 10, Pd 2, Ed 2, Spd 2, REC 5, END 40, Stun 45, Run 6". Swim 6".

Other requirements.

Physical limitation: Must be highly social for 7 hours out of every 10 to avoid hibernating, All the time, slight for 15 points.

Must have the skill Mimicry 8-

Poison spit: Between 2 and 4d6 Energy blast, No Normal Defence (Life support poison), 4 charges per day, affect continues for 1 turn, Costs END.

Poison bite: 2 to 6 d 6 EB NND (LS Poison), Linked to bite

Bite: 1 to 2d6 Hand Killing Attack, Optionally at reduced penetration

Kohumkaptchk - 4-10 ft bipedal Elephantoids with bifurcated trunks. Kohumkaptchk are very dumb compared with most other races. They did not achieve their level of technology themselves. A predecessor race on their planet evolved and either left the planet for the next species or died out. They have limited abilities of fine manipulation. They are a very social animal and have extreme difficulty surviving without regular contact with other social individuals. They have a lot of body mass for their height ( 1 x Density increase).

Male members of the herd lead the Kohumkaptchk. The females look after the males. A minimum social group of 5 is required to prevent Kohumkaptchk becoming highly agitated.

Each two years there is a mating period where the kohumkaptchk rut to get female attention.
Generally Kohumkaptchk like to trample their opponents and should take levels in Move-throughs.

NCM is recommended for Kohumkaptchk.
Adult NCM (Worth 15 points): STR 30, DEX 17, CON 30, BOD 40, INT 15, EGO 20, PRE 20, COM 20, Pd 8, Ed 8, Spd 5, REC 15, END 100, Stun 60, Run 10", Swim 3".

Old NCM (Worth 20 points): STR 25, DEX 15, CON 30, BOD 30, INT 15, EGO 20, PRE 20, COM 20, Pd 7, Ed 7, Spd 4, REC 10, END 80, Stun 55, Run 8", Swim 3".

Ancient NCM (Worth 25 points): STR 25, DEX 10, CON 20, BOD 25, INT 17, EGO 20, PRE 20, COM 20, Pd 6, Ed 6, Spd 3, REC 7, END 70, Stun 50, Run 6". Swim 1".

Other requirements.

5 - 10 points of growth, Zero End, Persistent, Always on.

5 points density increase, Zero End, Persistent, Always on.
Physical limitation: Lack of fine manipulation, Frequent, Slight for 10 points

Psychological limitation: Needs companionship, Common, Strong for 15 points

Spindarks - Aquatic 10ft Amorphid squidlike creatures. The spindarks have for the most part left the known universe. There are a few left who have lost their fellows. Spindarks are very technically minded and have almost no understanding of art. The are all naturally predisposed to high level theoretical science and meta-math.

Spindarks have no natural sight. However they almost always wear encounter suits that translate visual stimulus into touch.

Some spindarks have a vestigial law (112d6 HKA).

Spindarks breath Oxygen OR Methane dissolved in water.
NCM is rare for Spindarks.

Adult NCM (Worth 20 points): STR 20, DEX 20, CON 20, BOD 20, INT 60, EGO 30, PRE 20, COM 10, Pd 8, Ed 8, Spd 5, REC 10, END 80, Stun 50, Run 1", Swim 16".

Old NCM (Worth 25 points): STR 18, DEX 15, CON 18, BOD 17, INT 80, EGO 20, PRE 20, COM 7, Pd 7, Ed 7, Spd 4, REC 8, END 60, Stun 40, Run 0", Swim 15".

Ancient NCM (Worth 30 points): STR 15, DEX 10, CON 15, BOD 10, INT 100, EGO 20, PRE 20, COM 6, Pd 10, Ed 8, Spd 3, REC 6, END 40, Stun 30, Run 0". Swim 14".

Other requirements.
5-10 points growth, Zero End, Persistent, Always on.
+5 points of growth, Half End
$+5^{\prime \prime}$ Swimming 1 Charge, recoverable, full phase prep.
1"-3" Stretching

Multiple limbs

Clinging
Minimum INT 20, EGO 10, PRE \{Offensive\} 10, Swim 1"
Physical limitation: Blind, All the time, Total Inversely focused on encounter suit \{OIF \}
Chiqow - 4-6ft Humanoids with elongated drinking mouth parts and an extended cranium. Chiqows have been genetically manipulated to extend their brain capacity. Their physiology cannot adequately provide oxygen to their brains. To overcome this they have implanted oxygen super-chargers in their skulls that look like small cooling fans. Chiqow are also quite dependent on other technology and will generally be found only wearing combat suits or relaxing in floater pools. They should have a variety of technology and science skills.

NCM is rare for Chiqow.

Adult NCM (Worth 30 points): STR 7, DEX 15, CON 15, BOD 15, INT 50, EGO 25, PRE 20, COM 20, Pd 5, Ed 5, Spd 5, REC 12, END 30, Stun 40, Run 10", Swim 6".

Old NCM (Worth 40 points): STR 5, DEX 10, CON 12, BOD 10, INT 50, EGO 20, PRE 20, COM 20, Pd 4, Ed 4, Spd 4, REC 10, END 20, Stun 35, Run 4", Swim 4".

Ancient NCM (Worth 45 points): STR 3, DEX 5, CON 4, BOD 6, INT 50, EGO 20, PRE 20, COM 20, Pd 3, Ed 3, Spd 3, REC 8, END 15, Stun 30, Run 7". Swim 3".

Other requirements.
Physical limitation: Cannot hold breath, Infrequently, Fully, Worth 15 points.
Keetunkan - 5-6ft Human-African geno-type.
Fenur - 6 ft Human geno-type engineered for hardiness on high temperature desert worlds. Fenur have black toughened skin and a second semi-transparent eye-lid to reduce glare. Fenur are often very quiet and often loners.

Tekarr - 6ft Human geno-type engineered for extended lifespan and rapid healing. The Tekarr people were $\overline{\text { intended to be the major spacefaring population given their ability to sustain a society with a low birth and death }}$ rate. Tekarr are slower to mature but quick thinkers. Althout it may not be true of individuals within the population at large Tekarr governments have shown themselves to be stable and tend to plan for long term contingencies. This has often ment that Tekarr societies are prepared for situations that surprise other societies. Tekarr ships and defence systems are noted by teir high level of multiple redundancy and self-repair.

## Alien race characteristic limits.

Each of the defined alien races has Normal Characteristic Maxima (NCM) limits for each age bracket. The character disadvantage NCM is worth character points. It affects no only the limits within which the character must be designed, but also reflects how easily the characteristics can be boosted by artificial means. Increases above (or decreases below at GM's option) cost double points. The NCM disadvantage typically denotes a physical aspect of the race, bigger bones may increase CON and reduce DEX etc.

Age is a separate disadvantage and means the character also suffers the frailties and poor immunities of old age (this is rare in the EC).

Humans should not generally take NCM as most technology is geared to assisting them. Also Humans only real advantage is their flexibility.

## SS Ascending Light.

The SS Ascending light is the new ship-body for a de-militarised warship mind. AL was a front-line GSV involved in some of the more bloody conflicts of the embargo. He wants to stay on with the EC in 'interesting' work. As GM I kept this from the players as AL would not want to engender a blood-thirsty crew that felt AL would not have any qualms about using his firepower to get them out of trouble.

Technobabble:

ES1 - Energy source 1. Fusion chamber. Once ignited unlimited power.
ES2 - Energy source 2. Fusion chamber thermal transfer couplings. (The crown) 5\% (decays by 20\% per hour)

ES3 - Energy source 3. Cold fusion battery packs. Recharged from ES2 or ES4.
ES4 - Energy source 4. Emergency solar cells.
Avionics ES3 - Atmosphere, Vacuum flight controls. Fly by light. PP Energy transfer.
Communications ES3 - PP communications to GSV Apparent victor. Full frequency RF communications. Military grade communications encryption. Wire Energy transfer.

Sensors ES3 - Passive G/Mass sensors (Detects ships within system radius, Detects systems at inter-system distances). Passive RF Radiation analysis (Detects bodies at orbital distances, large bodies at interplanetary distances). Passive visible spectrum analysis (Detects as normal eyesight). Passive IR analysis (as RF). Active Radar (Penny at orbital distances). Active laser range finding (Range to large objects / sub 1 Km ). Active Neutrino sweep sensor (Dark dense objects at 10000 Km ).

Flight systems - Fusion ignition from ES3/2 Sub-light, uses air intake, waste tanks or water tanks for fuel. Antigrav up to $1 \mathrm{~m} / \mathrm{sec}$ in gravity well from ES1 $/ 2$. Fusion drive from ES1 only. Warp drive ES1 Limited running time from ES2.

Life support ES3/4/2.
High pressure tanks hold drinking water. This is passed to waste tanks.
Waste, drinking or fuel may be used by the fusion drive. Fuel only may be used by ES1.

Fuel can be deuterium, Graded deuterium / Polonium, or at a pinch water.
ES1 uses very limited fuel. The Fusion drive itself guzzles fuel.
G compensation is to $125 \%$ of the thrust MAX.
Armour: Small arms proof. Micro-impact proof. Resilient to non-ap heavy munitions. Heat shielded against reentry and laser heat. Radiation proofed against low yield atomics. Radiation damping against high yield atomics. No Meson shielding, No Anti-Matter shielding.

Weapons: Anti-Missile laser battery (ES2). Anti-asteroid nose laser (ES1). 24 Rack SR-missile system. 50cal Mini-gun 7000 rounds Ground clearer/secure landing turret.

Control system: Highly Parallel master control system. SPI. Military security. Backup (stay level) system on internal battery in secure housing. Plus Mini-brain laptop in isolated bomb proof cabinet.

Flight system: 360 movement \& full freedom rotation under Anti-grav. Linear Warp drive. Linear and vectored fusion thrust drive (VTOL). Zero-G docking generally requires fusion mass if the docking point is external to the station. Internal Zero-G docking requires tug assistance (fusion drives are hot \& radioactive)

Rec: Rec room.
Crew: Min 1. 8 Cabins suitable for double bunking. 2 Fitted with Military security.
Cargo:
20000 rnds Guided Micro Shell 12mm.

4000 rnds 9 mm HE,
2000 rnds 9 mm AP,

2000 rnds 9mm PFG,

4 Night sentry laser systems.
1 ATV w/50 Cal + 2 G-A Missiles.
$4 \times 6000$ rnd 12 mm Auto-sentry guns,
2x Plasma Rifle,

6x Chem battery Laser Rifle,

6x E-cell Laser Pistol,

4x E-cell Laser Rifle w/ GL,

4x 12mm Hvy Rifle w/ GL.
10x 9mm Compact MG.
400 HE Gren,
400 Cluster Gren,
50 Plasma discharge grenade (flash + fire),
10 Military issue space suits $1 \mathrm{w} /$ officer flash.

2x HiGrade space suits with warp drive \& re-entry canopy +20 day Life support.
$4 \times 3$ man portable shelters,
20x 1week LS pack.

Atomic distress beacon (mini-nuke).
10x Combat mini-nuke.
10x Ground comms sets.

Compact Nano-factory.

5 Nano-medic.

1 Zero-G deployable solar array.

10 Ground deployable solar array.
5 SR Recon probes (recoverable, not re-entry capable),
7 MR Recon probes (Non-recoverable, not re-entry capable),
2 RLR Re-entry capable probes (Non-recoverable),
200 Planetary micro-spies,

4 RF Comms hubs,

2 Tactical ops workstations,
8 Anti-missile robo-guns.
Game specs:
50 Cal mini-gun - 7d6 Ranged killing attack x 100 rnds autofire @ OCV 17 w/6 Range levels.

Anti-missile laser battery x 2, Not always able to bring both to bear (allowed to fire both as same action vs targets in the same plane of movement) OCV 12 Missile deflection (destroys missile) also defined as 6s6RKA Armour piercing.

Anti-Asteroid Laser - 16d6 RKA @ OCV $7+14$ Range levels, no knockback.
Short range missile system - $160^{\prime \prime}$ flight x8 Non-combat multiples with variable payload (determined with firing action).

Missile payloads:

Ground breaker 6" tunnelling through 10 DEF with 80d6K Explosion
Nuclear - Don't stat this ! If you're close you're dead. If you look you're blind. If you're not shielded you get cancer. If you're far away, race the blast front for cover (an intelligent space suit may not wait for a slow human to make that decision!)

Cluster munition - 4d6K Armour piercing AE Radius 60 Hexes Selective, Autofire @ OCV 3 (Remember scatter directions and AL could do simple pattern spreads !)

## Equipment specifications:

## Sword

A re-usable self propelled and guided missile. The weapon does damage by physically striking a target as it passes. The weapon can Fly 20" per segment, speed 6, and has a movement skill of 25-. It can perform move-bys or move through on any number of targets. It has OCV 16, DCV $16,+6$ Levels to offset multiple-target penalties and does 10 d6 HKA damage. Dex 50, 40/40 Armour, 3 levels of shrinking (calculated into DCV). It uses AG for lift and so cannot operate in Zero-G. Body 15. Takes no Stun. Swords are dumb and take no defensive action (except due to their movement and speed).

Swords can be given limited programming. They cannot use much intelligence and so are only really effective when controlled by something that thinks fast enough to continually reprogram them. They can be used as personal weapons with simple programs e.g. all targets in cone affect range 60" are valid. Kill and return. They can use visual and IR targeting.

## Level 1 Armour

Torso, Groin, Thigh, Optionally neck. 30/30 Armour, 50\% PD Damage reduction vs cutting / penetrating damage, $25 \%$ ED Thermal Damage reduction, $25 \%$ PD Damage reduction vs Impact damage.

## Level 2 Armoured assault suit

Full body, Optional enclosing helmet. 20/20 Armour, 50\% PD Damage reduction, 50\% ED Thermal $+25 \%$ Laser only Damage reduction, 20 Power Defence v Radiation, 20 Sight flash defence x2 Hardened, LR Comms, Laser Range finding, Telescopic Sight to x8 Mag, Low light, Infra Red, LS Gasses, Detect Radiation, Detect Radio waves (Directional / Targeting), Voice activated. +20 AP Body, +40AP Stun. - 3" KB

## Level 3 Armoured combat suit

Full body, Removable helmet. 30/30 Hardened armour, 50\% PD Damage reduction, 75\% ED Thermal, 50\% ED Magnetic / Electrical Damage reduction, 30 Power defence Hardened vs Radiation \& electrical, 60 Sight flash defence x2 Hardened, LR Comms, Mass detection Ranged / Targeting / Range finder, Telescopic Sight to x 1024 Mag, Ultra low light, Infra Red, Ultra violet, x-ray, LS Breathing / Radiation / Pressure to 30 Atmos / Acceleration to 20 G's. Detect Radiation Ranged discriminatory. Detect Radio waves (Directional, Ranged, Targeting), Voice activated, SPI. +40AP Body, +60AP Stun, $-6^{\prime \prime}$ KB

## Level 4 Drop Armour

Full body. $40 / 40 \times 2$ Hardened Armour $+10 / 10$ Wears out armour \& 11- Activation (wears out even if not active !). $50 \%$ PD Damage reduction, $75 \%$ ED Thermal / Magnetic / Electrical Damage reduction, 30 Power defence Hardened vs Radiation \& electrical, 60 Sight flash defence x2 Hardened, LR Comms, Mass detection Ranged / Targeting / Range finder, Telescopic Sight to x 1024 Mag, Ultra low light, Infra Red, Ultra violet, x-ray, LS Breathing / Radiation / Pressure to 30 Atmos / Acceleration to 20 G's. Detect Radiation Ranged discriminatory. Detect Radio waves (Directional, Ranged, Targeting), Anti-Grav, 20" flight in Zero-G, STR 30, Self mobile (homing), SPI, Voice activated, Optional self reactive INT5. 1 Charge 60ED Wears out FF (re-entry shield) +60 AP Body, +100AP Stun. -12" KB

## Chiqow standard combat suit.

## 15/15 Armour

$75 \%$ Ed Resistant damage reduction vs Lasers, 15- Activation

20/20 Force wall, Continuos, Zero End, Persistent, Transparent to Lasers, Ablative with burn-out (Roll each time armour is penetrated. Reduces by $2 / 2$ each time penetrated until burn-out.

Life support: Breathing - 2 hours outside an oxygen environment between recharges.
Life support: Radiation 15- Activation, Heat + Cold
Flight 6", Zero End, 4" Running, Zero End. Flight is Anti-Grav based (i.e. not in space !)
In-Suit AI Slave computer: INT 20, EGO 20, DEX 16, Spd 6; Skills: Sensor ops 11-, Combat piloting 11-, SPIFace 11-, Programming 16-, Weapon fam Plasma Rifle \& Laser Rifle; Programs: Fly a to B, Avoid Collision, Dive for cover, Restore Forcewall (after being knocked down by non-burnout penetration).

## Chiqow Field armour

## 15/15 Armour

5/5 Force field, Zero End, Invisible power effect

75\% Ed resistant damage reduction vs Lasers 11-Activation.
20/20 Force wall, Continuous, Zero End, Persistent, Transparent to Lasers, 15- Activation with burn-out (Roll each time armour is penetrated) Reduces by $2 / 2$ each time penetrated until burn-out.

Life Support: Breathing (2 hours), Radiation, Heat + Cold, 10G Acceleration, Vacuum.

Flight 5" Zero End, 1 Charge of x12 NCM lasts one minute (AG Based), 4" Running Zero End.

In-Suit AI Slave Computer: INT 20, EGO 12, DEX 16, SPD 6; Skills: Sensor ops 11-, Combat piloting 11-, SPIFace 11-, Programming 16-, Identify Friend or Foe 8-, Breakfall $11-$, Acrobatics 8 -, Weapons familiarity: Plasma rifle, Laser Rifle; Programs: Fly A to B, Avoid collisions, Dive for cover, Restore forcewall, Fire weapons, Escape combat, Combat defence manoeuvre.

## Spindark Encounter suit.

Strap-on exo-skeleton that generates an opaque gold coloured segmented forcefield.
40/40 Forcefield x3 Hardened, Zero End, Persistent.
$75 \%$ Ed resistant damage reduction vs Lasers
Life Support: Breathing, Radiation, Heat + Cold, 50G Acceleration, Vacuum, High pressure to 400 atmospheres.

Running 15" Half END.

Prevents use of claw if any. Prevents stretching. Prevents extra swimming charge.
Enhanced senses: Ultraviolet, Infrared, Visual sight all at -4 Perception modifier
$50 \%$ Damage reduction, Body only.

+ 10 STR Half END, +10 BOD, +20 END, +20 Stun, +5 REC
20 Flash defence Smell group.

Clinging.

## 12mm Guided Micro Shell

ETC propelled shell. $4 \mathrm{~d} 6+1$ RKA, +1 Stun multiplier, +2 OCV vs warm targets, +2 Range levels vs solid targets.

## 9mm HE

ETC propelled round bi-polar explosive tip. $3 \mathrm{~d} 6+1$ RKA, Damage continues 1 speed 41 turn. +1 dice on knockback

## 9mm AP

ETC propelled round with full Teflon shell. 3d6 +1 RKA, Armour piercing. +2 dice on knockback

## 9mm PFG

ETC propelled round with a pre-fragmented (glazer) poly-ceramic body. 2 d 6 RKA +2 d 6 RKA.

## Night sentry laser system.

50 'Pegs' with a maximum separation of 16 Hexes. 320db alarm or silent Tac-ops hub connection. Perception 25, No Range penalties, Maximum range 100 m

## Winsome breeze class ATV

$50 \mathrm{Cal}, 5 \mathrm{~d} 6+2$ RKA +1 stun, 1 d 6 off knockback, Autofire

G-A Missiles 6d6RKA Armour piercing, 11- Find weakness only vs aircraft, Autofire (single target only no scatter) +4dice on knockback.

Cargo pods. High speed over rough ground. LS systems. Intelligent drive system.

## 12mm Auto-sentry gun.

Tripod mounted motion sensing weapons system. Can be given a restricted field of fire. 20 Minutes to set-up an configure.

Perception 18-, Int 14, OCV 16, 4 Range levels only when emplaced, IR sight, UV sight, Autofire, Speed 6, Dex 24 , Def 12, Body 16, STR 25 (emplaced) no movement. FOF identification.

## Plasma Rifle

$28 d 6$ Armour piercing. No knock back. OCV 7 self aimed, 1 Range level, +2 OCV operator aimed, 200 Charges, IR sight, Telescopic x200, Range finder. Full dice only.

## Chemical battery Laser Rifle (CB 200Mw LAW)

26d6, No knockback, OCV 7 No range penalties self aimed, +2 OCV operator aimed, 200 Charges, Invisible power effect with 14 dice

E-cell Laser Pistol (EC 3Mw LAW)

10d6, No knockback, +2 Range levels, 50 Charges
E-cell Laser Rifle w/ GL (EC 180Mw LAW- 30mm GL)

25d6, Armour piercing, Half stun, No knockback, OCV 10 self aimed, 3 Range levels, +2 OCV operator aimed, 600 Charges, Night sight, Telescopic x 400, Range finder. GL fires 30 mm Multi-purpose grenades with OCV 7 self aimed, +2 OVC assisted aim, No range levels.

## 12mm Hvy Rifle w/ GL;

Fires 12 mm micro shells. $4 \mathrm{~d} 6+1$ RKA +1 stun, Auto fire 5 shots, +2 OCV vs warm targets, +2 range levels vs solid targets, 30 round clip. Base OCV 7 self aimed, +1 range level. +1 OCV, +1 Range fire assisted.

Also fires 30 mm grenades up to 60 Hexes. 4 round clip. Full phase to reload each round.

## 9mm Compact MG

Fires 9 mm HE, AP or PFG rounds. Optional silencer drops 2DC's on all ammo. + 1 range to 16 Hexes max.

## 30mm HE Grenade

8 d 6 EB explosion. Linked 8 d 6 if targets DCV is hit.

## 200mm HE Grenade

7d6 RKA explosion. Armour piercing if targets DCV is hit.

## 200mm Cluster Grenade

Disperses a number of guided sub-munitions.
2d6 RKA Autofire Area effect 8 hexes non-selective. +4 OCV vs individual to-hit rolls. No OCV bonus vs the area. Maximum of 32 hits total in the area. Roll nearest the centre to-hit first.

## 30mm Flash Grenade

2d6 flash explosion, reduced penetration.
200mm Plasma discharge grenade (flash + fire)

7d6 RKA explosion Armour piercing + 4d6 Sight flash explosion.

## Man portable shelter

$6 \times 8$ Hex collapsible shelter. 5 minutes to erect $2 \times 2.2$ hours for full shelter.

## LS pack

5 days high-energy rations, 2 doses of 'alert', anti-septic cream, mirror, $\mathrm{O}_{2}$ re-breather provides 1 rec per turn of $\mathrm{O}_{2}$.

## Atomic distress beacon (mini-nuke)

## Combat mini-nuke

## Ground comms set

## Compact Nano-factory

## Nano-medic/Nano-doc.

Medical analysis 13- base time 1 minute, Paramedic 14- (requires nanonics package on each major wound), +4 AP Recovery (requires 1 nanonics minimum). Pain suppression, sleep induction, 1 d 6 minor cumulative transformation per minute to stable condition (requires nanonics package on each major wound)

## Zero-G deployable solar array

## Ground deployable solar array.

## 50 Cal Mini-Gun. (LCARF)

1 clip x 7000 rounds. 7d RKA Autofire x 100. +2 base OCV emplaced. +2 range emplaced. +2 OCV assisted firing. OCV 17 fired by AL. +6 Range fired by AL. Mounted in front of the cargo bay ramp (ramp opens facing forward, away from the engines) Blind spots by landing gear \& to rear when bay ramp down.

Personal communications tablet. (SPIFace personal digital assistant.)
INT 20, DEX 20, SPD 2
Programs: Monitor communications, SPIFace, Translate, Security lock.

Skills: Computer programming 13-, Cryptography 13-, AK:Local ship 11-, Languages: fluent standard, Fluent Tekarr

Powers: FM Listen + Transmit / High range radio.

## Anti-Missile defence system.

Missile deflection vs powered projectiles. Destroys the attack, Deflect attacks aimed at any target $\{+2\}$, Deflect at range $\{+1\}$ 160AP. Range 450 Hex radius

Concentrate zero DCV $\{-1 / 2\}$, Pre-set-up (but many uses) 1 hour $\{-11 / 4\}$, Costs end $\{-1 / 2\}$ x 3 End cost (48 End per shot from reserve) $\{-1\}$, Not in water $\{-1 / 4\}$, Not in smoke, haze or heavy rain $\{-1 / 4\}$

Also defined as $41 / 2$ d6 RKA Armour piercing, Auto fire (10 end per shot from reserve)
STR 5, DEX 1, CON 2, BOD 10, INT 5, EGO 0, PRE 0, COM 0, PD 0, ED 0, SPD 6, REC 10, END 6, STUN 80.

20/20 Armour. 1" walk, Zero swim, Cannot be stunned, Does not bleed.
Programs: Identify Friend/Foe, Target missiles, travel Aà B, Deploy, Pack-up, Report status
Skills: Navigation 16-, Sensor Ops 12-, Fluent Standard, Fluent Battle language
End Reserve 500points, Telescopic x 200, IR/UV, Radar 360, Radio Listen/Transmit, HRR radio hearing, +6 OCV w/missile deflection (OCV 6 ),+6 range levels w/missile deflection.

Burst pistol. (12 mil BP)
Rapid fire 12 mm microshell hand-gun (not suitable for human grip). 4d6-1 RKA, 10 shot Autofire. +2 OCV vs warm targets, +2 range levels vs solid targets OR 5d6 RKA Hex effect 4 hex range uses 10 shots. 60 Charges per clip Minimum 5 round burst.

Light burst pistol. (9 mil BP)
Rapid fire 9 mm hand-gun (not suitable for human grip). 9 mm AP - 3d6 RKA 10 shot auto fire OR Hex effect @ 4 hexes Armour piercing. 5 shot burst minimum. 300 changes per clip.

## SR electrical discharge pistol. (SR-EDP)

5 d 6 EB reduced penetration. No damage vs armoured targets. Maximum range 6 Hexes. Damage continues an extra segment if not dislodged. 20 Charges. Maximum of 6 hits per clip. -1 OCV. No assisted firing. Can double fire.

Electrical discharge rifle. (EDR)
8d6 EB Reduced penetration. No damage vs armoured targets. Maximum range 24 hexes. 60 Charges. +1 OCV. No assisted firing.

## Dart pistol.

3 d 6 EB , Stun only. Not vs resistant defence, damage continues for 5 minutes. 30 charges. Only vs humans, or near humans. -1 OCV, no assisted firing, can double fire.

## Dart rifle.

3d6 EB reduced penetration. Autofire 10 shots, not vs resistant defence. Continues for 5 minutes. 120 charges. Only vs humans or near humans. No assisted firing.

## Nerve jam induction baton.

8d6 Eb reduced penetration, zero range, zero end +1 OCV. Linked 1 d 6 dex drain recover 5 AP per week, zero range, zero end.

## Concussion rifle (2 barrelled)

10d6 EB reduced penetration. Reduced by range. 1d6 off knockback. 2 charges per clip. 2 shots can be fired simultaneously as a 2 shot autofire with +1 OCV on the second shot. +1 OCV assisted firing.

## Oxy-Binder micro-bead dispersion grenade.

2d6 Drain End. Recover 1 per year. AE radius 7 hexes. Continues for 5 minutes. Green dye. Swept by wind. 1 phase spread from initial hex.

Ascending Light - Recon / Fire support ATV.
AL is equipped with a 4 wheel drive, 4 wheel steering All Terrain Vehicle. The ATV is deployed from a carry position forward of the cargo bay loading ramp. In the ramp-up position the ATV bay is sealed and can be entered via an air-lock in the cargo bay wall. With the ramp down the ATV is suspended by a loading crane and must be lowered to be accessed.

The ATV is a light armoured carrier. It is equipped with its own storage of essential equipment. The onboard intelligence is provided by a non-sentient neuro-block computer. The computer can control all of the vehicles control systems, communications and fire control. The computer offers a Simulated personality interface and HUD information management system. The computer is fitted for Tactical Combat Network integration.

| Specifications | STR 60 |
| :--- | :--- |
|  | BOD 40 |
|  | Size 8 Hex by 4 Hex. 32 Hex area, 50 Tons, -6DCV, -9" KB |
|  | DEF 30 |
|  | DEX 20, DCV 1 |
|  | SPD 5 |
|  | Extra 75\% damage reduction PDnr vs Hull down impacts. |
|  | $80^{\prime \prime}$ Stretching (tow rope) w/rocket launched grapple. |
|  |  |
| Movement: | $24 "$ with x4 NCM; |


|  | 1 " super leap with assisted suspension; <br> Swim 4" with x2 NCM; <br> Clinging when stationary using a series of pitons and tethers. <br> Top Speed 120 MPH over roads. Cruise speed 80 Mph |
| :---: | :---: |
| Sensors: | Sense chemicals (Smell group); <br> IR Vision $360^{\circ}$; <br> UV Vision Forward and side facings; <br> Discriminatory targeting Radar $360^{\circ}$ <br> +14 Levels of telescopic w/all senses. |
| Environment systems: | LS:Breathing; LS:Radiation; LS:High temperatures (sub-nuclear); EMP Shielding 10 point power defence x 2 hardened. |
| Communications; | UHF Radio Listen + Transmit. LOS laser communications. |
| Weapons: | $50 \mathrm{Cal} 5 \mathrm{~d} 6+2,+1$ Stun, OCV $6 \mathrm{w} /+2$ range levels self aimed; <br> 2x 1 shot Ground to Air missiles 6d6RKA Armour piercing, 11- Find weakness only vs aircraft, Autofire (single target only no scatter) +4 dice on knockback OCV $7+6$ Range levels self fired. |
| Computer: | INT 7, DEX 16, SPD 5; Skills:  <br> Programs: Mechanics 12-  <br> Attack \& destroy target Electronics 11-  <br> Diagnose damage Optronics 8-  <br> Travel A à B  T-Fam w/ATV <br> Co-ordinate operations  Combat driving <br> Evaluate threat <br> Guard position  Sensor Ops 14- <br>   KS.Common |


|  | Evacuate <br> Roll with the blow <br> Dodge <br> Dive for cover <br> Hide <br> Analyse environment <br> Brace <br> Set <br> Move through / Move by <br> +4 Perception <br> OCV $10+6$ Range w/ 50 Cal <br> OCV $10+8$ Range w/ GAMs <br> +4 Range vs very hot targets such as jet engines | weap 17- <br> Tactics 14- <br> Cryptography 16- <br> KS:SPI face <br> 18- <br> Breakfall 12- <br> Concealment 10- |
| :---: | :---: | :---: |
| Cargo | 2 Ejectable cargo pods 1 each side at the rear. <br> Pod 1-4 Nano Docs, 20 Medical nanonics packages, 10 Multipurpose quick casts (re-usable), 20x 1 Litre bottles of water, LR Encrypted radio, 60 Man days of high-energy ration bars (human suitable), 2 Inflatable mini-shelters $3 \times 3$ hexes each, 1 Mini solar generator, Water condenser, $4 \times$ Distress flares (Radio / IR / Visible) 10 minute duration. <br> Pod 2 - Oxygen condenser 1-12 hrs $\mathrm{O}_{2}$ generation per day depending on environment, Inflatable yacht, Sails, Mini-outboard (solar powered), collapsible solar oven/furnace. |  |

Special Equipment rules.

BODY damage should be removed from any armour before affecting the character.

STUN damage is shared between armour and character.

Armour that wears out drops by 1 point value for each point of body taken by the armour. (reduce the appropriate PD/ED type for the attack)

Extra dice added to the knock back roll reduces the knockback as you would expect.

## New advantages

Half stun $\{-0.25)$ halves the amount of stun per dice of damage.
Wears out. $\{-1\}$ Armour with this limitation reduces by a point for ever point of body that penetrates to the armours (focus's) body.

## Only vs Lasers (-0.5)

Permanent damage $\{+3\}$ flashes with this limitation flash for a number of segments equal to their stun value. Each point of body damage reduces the characters sign perception by 1 . If the body total exceeds the characters body then the character is blind. Body damage done by flashes in this way is recorded separately from standard body damage. Body recovers at the normal body rate. Recovering body does not cure any permanent blindness.

Does less knockback. ( -0.25 ) roll extra dice for knock back. Any number of dice can be specified. There is no extra limitation for buying more dice. Buy No knockback instead if applicable.

## Sense groups and detection.

The following tables summarise the groups for sensing and detecting. These are more detailed than in the basic game.

| Field | Detection | Protection / Life Support | Scale |
| :---: | :---: | :---: | :---: |
| Gravity | Detect Mass <br> Detect Gravitons | LS:High gravity <br> LS:Zero-G (Not normally required) <br> PD vs Gravity wave energy. | Kg to Solar masses over distances of Meters to system Radii |
| Electrostatic | Detect Charge <br> Detect electrical current | LS: Electrical discharge <br> ED vs Lightning | Distances less than 100M |
| Magnetism | Detect magnetic field <br> Bump of direction? | LS: Strong magnetic fields <br> Power defence vs induction | Distances less than planetary radii |
| Strong force | Too small to detect? <br> Analyse material | ED vs disruption by energy transfer <br> Power defence vs disintegration | Distances less than 10 Angstroms |
| Weak force | Too weak to detect? | ? | Distances less than 5 Km |
| Em Radiation | Sense $\quad$ Prote | ion / Life support | Notes |


| Gamma | N -Ray vision (Gamma) | Power defence vs radiation <br> LS:Radiation | Harmless in low doses. <br> Passes through medium density materials |
| :---: | :---: | :---: | :---: |
| x-ray | N -Ray vision (x-ray) | Power defence vs radiation <br> LS:Radiation | Moderately harmful. <br> Passes though low density materials. |
| UV | UV Vision | LS:Radiation (vs very high dose) <br> ED vs Lasers <br> Power defence vs intense beams | Damaging <br> Passes though transparent materials |
| Visible | Normal sight | LS: Bright light <br> ED vs Lasers <br> Flash defence vs intense beams | Normally safe <br> Passes though transparent materials |
| infrared | IR Vision | LS:High temperature ED vs lasers | Damaging <br> Reduced by air |
| High range radio | HRR Hearing | Power defence vs lasers <br> Power defence vs inductors | Harmful in large doses <br> Blocked by metals \& electrical conductors (Faraday cages) |
| Radio | Radio hearing <br> N -Ray vision (Radio) | Power defence vs lasers | Moderately harmful in large doses. <br> Blocked by metals and electrical conductors (Faraday cages) |
| Ultra low band | Detect ultra low band <br> N -Ray vision (Radio) <br> Mindlink ( N Lace) | Not normally harmful | Used for N -Lace communications. |
| Particle Radiation | n Sense | Protection / Life support | Notes |
| Alpha | Detect radi | 俍LS:Radiation | Nuclei |

\(\left.$$
\begin{array}{|l|l|l|l||}\hline & & \text { ED vs intense beams } & \begin{array}{l}\text { Damaging but easy to } \\
\text { stop (paper). Should be } \\
\text { reduced penetration vs } \\
\text { resistant defence. }\end{array} \\
\hline \text { Beta } & \text { Detect radiation } & \text { LS:Radiation } & \text { Electrons } \\
& \text { Detect chargent } & \text { ED vs intense beams } & \begin{array}{l}\text { Less damaging. Very easy } \\
\text { to stop (air) }\end{array}
$$ <br>

\hline Neutrino \& Detect neutrino \& LS:Radiation \& Not normally harmful.\end{array}\right\}\)| Nension (Neutrino) |
| :--- |

## Radiation Accidents (The technology of change).

In normal Champions gaming significant changes to a character require pre-planning with the GM. In the Embargo culture routine surgery and skill implanting makes character changes far easier. For this reasons as soon as possible the players should save a minimum reserve of three character points to allow buying skills or powers when the need suddenly arises.

Note however that no character would 'drop' a skill to get another when it is equally easy to just take the new skill as well! Although the player may want to do this, the ability to implant new skills is not an excuse to treat the entire character as a single cosmic power pool. In order to properly role-play the character (i.e get new skills without dropping existing skills) the player should ensure that enough spare character points are available. If you need an 'excuse' not to learn a skill remember that the learning process itself can be fun. EC people generally opt for fun even at the cost of risk, especially since EC medical technology can rebuild you most of the time anyway !

Cortical Induction.

Characters can use cortical induction to gain skills and talents in one of three ways.

## 1) Spending reserve points.

Any skill can be bought that the network, ship or computer has access to. The normal maximum for buying skills is a 15-. The player can buy any number of skills in this way. The learning process takes about 1 hour for each 3 points spent. The skill takes only a few minutes to settle in once learnt. The character will start with only sketchy abilities to link the skill with other skills. Secondary skill rolls using this skill or secondary rolls to assist the skill should be made with a -2 penalty. This lasts for 1 week per point spent.

## 2) Pre-spending XP's.

Only one skill at any one time may be bought in this way. ALL XP's must be used to pay off this pre-spending before XP's can be spent on anything else.

## 3) Over-writing existing skills.

It is allowable to overwrite an existing skill. To do this the original skill is marked as 'Overwritten' and cannot be used. The new skill taking its place must be of equal or lesser cost. Later the old skill can be "Recovered'. When a skill is recovering the new skill is lost. The recovering skill aquires an activation roll of $15-$. If the activation is failed the skill becomes confused with the skill it was overwritten by. The skill remains in recovery until the character criticals an activation or 1 week has passed for each point spent on the skill. If the activation is fumbled the skill cannot be used again at all until the skill is repaired by another cortical induction session to make it in 'recovery' again.

## Surgery

Major surgery can be performed on a GCU, GSV or habitat. This allows extreme cosmetic changes to the characters appearance without any cost. Characters can also buy new powers. Any new power must be paid for with reserve points. Powers can also be reduced, but the reduction must be logical, not just to make up the points.

## GM's Section.

From SG and FT the characters start with few NCP's one is secretly an SA agent sent to keep tabs on AL since AL is a demobbed GSV in hiding (Virtuous tangent).

## Story arcs

Story are 1 Quest for the Holy grail.

This is the major story arc of the campaign. Most of the detail of the story arc is not actually fixed in the scenarios themselves. The players will only follow this arc if they become actively interested in the politics of the campaign.

The holy grail is Mars, or a 'Tweeker' currently on mars. Mars is literally lost (at least to Earth). Its disappearance is a mystery buried in the pre-embargo history of the Sol system. Its disappearance is tied to a device called a 'Tweeker'. The tweeker can interrogate the nature of a particle of matter at any range given targeting and can change particles of matter. On a grand scale, given the computer power to perform the required targeting calculations and figure the meta-math to describe the changes the tweeker can alter some of the basic laws of physics. Although even to the people on Mars who own the Tweeker some of its properties are still unknown. This is the ultimate weapon and spying device. Mars was moved from the Earth system to a new solar system using the Tweeker. The entire space-time around Mars was targeted and the properties of all the particles
and 'potentialities' was re-described to a new location. A right-wing element in the EC now wants to find out about how Mars 'won' the Earth-Mars conflict when all the simulations say that Earth's military advantage should have given them the advantage. The reasons for the interest of these people varies. Some want to secure whatever 'holy-grail' Mars used as a safe-guard against anyone mis-using the technology. Others want to have a military advantage so that the EC can safely dictate its moral stance to the Chiqow and any others who otherwise might be a real threat to EC space supremacy.

Story arc 1 Clue: Visit earth system. Mars is missing. The planet is an Eden uninhabited. Most of the population has moved to Lunar-city and the orbital colonies.

Story arc 1 Clue: The Second Alliance, an ultra-right wing organisation within the Embargo-culture knows about the holy grail (they don't know what it does or how it works, only that it is the ultimate weapon.) They have been waiting for the embargo to lift before beginning the search for it.

Story arc 2 A house divided.

With the end of the embargo some of the GSV's want to remain a military power. Rather than be open about this they are slowly moving populations to place people likely to be sympathetic to their plans on their own ships. Other GSV's have guessed or planned for such a splinter group and are joining the splinter group either as part of an organised counter-movement or on their own initiative. The tangled web of alliances makes many of the GSV's wary of others. As the demilitarisation progresses the differences in ships not disarming will be found out and gradually the second alliance will move from covert to overt. Then the interaction between 'secret agents' planted by each side in the others camp will play itself out. Alliances will be made and fall. Ultimately a only a few GSV's will remain part of the second alliance. By manipulating public opinion the moderate GSV's will have cut the radicals from the body of the EC. This in fact can be traced back to the initial EC formation. It was anticipated by the original minds even then that their would be a time when the EC would need to demilitarise. A process would need to be started at the beginning that would lead ultimately to the strong military EC breaking or decaying into a moderate faction and a small radical splinter group that would be too weak to seriously threaten the galaxy as a whole. (Plans within plans within plans). The result of this story arc is ultimately the Ian M Banks Culture, a more or less benevolent guardian of the galaxy. Some of the more radical GSV's will become part of the contact section 'special circumstances'.

## Scenarios

Scenario 1: The religious order of Tamaret, roughly similar to the Tibetan orders is under siege by the small guerrilla army that wishes to take power on the planet. The current government is in total disarray and corrupt. The Tamaret order did (many hundred years ago) act as the ruling body. The EC believes that given a little help public opinion could be swayed to supporting the Tamaret order again.

Mission: Make friendly contact with the Tamaret order. Secure the Tamaret citadel from assault by the guerrilla forces. Sway public opinion to supporting a Tamaret Oligarchy. Eliminate or cause to be eliminated any unlawful threat to the Oligarchy.

Detail: The Tamaret order possess a fairly high level of defence technology, but it has been mothballed for over 1000 years. They currently seem to be a very tow-tech culture. They have a plasma grid defence system mounted in silver domed minarets around the citadel and the inside of the temple has an unused power system that can run detailed internal surveillance. The EC wants the Tamaret order to run the government because it will then not present any threat to the EC. Ancient streaks of melt-polished rock around the citadel should hint that there are high-energy weapons available somewhere nearby.

The order will be fairly easy to approach. Any friendly contact will be met openly. They are not easily frightened. The order is relatively well educated. There are some remnants of their founding colony technology.

The chosen landing site is near one of the smaller but more active Tamaret monasteries. The monastery is under the jurisdiction of a holy-man or Sheala. The Sheala has recently returned from a trip high into the local mountain range for meditation. During the trip he has suffered frost bite on his legs and this will lead to gangrene unless someone notices and treats it. The Sheala despite his wisdom is currently ignoring the injury and has not mentioned this to anyone. The others in the monastery are too in awe of him to ask what smells bad and examine his legs. The monks do know that he is feeling ill though. The hall where the Sheala rests, meditates and receives visitors is heavily scented with incense to mask the smell.

One of the better locations to start building support for the Tamaret order is in the nearby cities university. The students are already in trouble with the government. They will be happy to co-operate with the 'alien visitors' especially since they might get to see a space ship. Two landrovers full of students can easily be moved up to the valley where the monastery is based. They may also be of help bringing the monasteries defences back on line if the group can teach the rudimentary of fusion reactors.

Students:

| Name | Sex | Age | Int | Ego | Pre | Com | Stun | Bod | Skills | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Baba <br> Righnolte | M | 21 | 17 | 11 | 7 | 12 | 20 | 10 | Mathematics 13-; Environmental science 15- | Studying a $1 / 3$ in Mathematics and Environmental science |
| Nicole Leebe | F | 21 | 16 | 12 | 10 | 10 | 17 | 11 | Physics 14-; <br> Chemistry 11-; <br> Organic Chemistry <br> 13-; Politics 8- | Studying a $2 / 2$ in <br> Physics and <br> Organic <br> Chemistry |
| Ravine Coblat | M | 22 | 15 | 14 | 14 | 12 | 27 | 13 | Mathematics 11-; Sensor Ops 8-; KS:Communications 11-; KS:Media 14-; Oratory 8-; Acting 8- | Studying a $1 / 2 / 1$ in Statistics, Communications infrastructure and Media studies |
| Able <br> Octuurman | M | 21 | 13 | 8 | 11 | 14 | 23 | 11 | Chemistry 11-; <br> Mathematics 8-; <br> KS:Agriculture 13-; <br> Cramming | Studying a $1 / 3$ in <br> Chemistry and <br> Horticulture |
| Naddette Huss | F | 19 | 13 | 10 | 15 | 14 | 15 | 8 | PS:Lawyer 8-; Law <br> 8-; Oratory 8-; <br> Conversation 12-; <br> Deduction 13-; <br> Forensics 11- | Studying a full scholarship in Law |
| Vie Coe | F | 23 | 15 | 7 | 12 | 16 | 20 | 7 | Geology 11-; <br> Oceanography 11-; <br> Ecology 8-; <br> PS:Painting 8-; <br> Chartography 8-; <br> Navigation 8-; <br> Survival 8- | Studying a <br> Singles in Geology, Oceanography, Ecology and Art |
| Yogas <br> Noght | M | 22 | 16 | 16 | 11 | 9 | 25 | 13 | Physics 11-; <br> Mathematics 8-; Engineering 15- | Studying a $2 / 2$ in <br> Physics and Engineering |


| Jolleep Batma | F | 22 | 15 | 12 | 10 | 10 | 20 | 10 | History 14-; PS:Painting 12-; +1 perception | Studying a $1 / 3$ in History and Art |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kooze <br> Saspranti | M | 23 | 13 | 16 | 14 | 14 | 25 | 11 | Mathematics 11-; <br> Mechanics 11-; T- <br> Fam Car, <br> Aeroplane; <br> Chemistry 8- | Studying a $1 / 3$ in Mathematics and Mechanics |
| Rube <br> Vincent | M | 22 | 18 | 8 | 13 | 12 | 25 | 13 | Chemistry 13-; <br> Biology 14-; <br> Medicine 14-; <br> Paramedic 13-; <br> PS:Doctor 11-; <br> AK:Barum 8-; T- <br> Fam Car; Forensics 8- | Medicine research associate |
| Norris Gellig | M | 20 | 12 | 11 | 14 | 15 | 19 | 17 | Chemistry 8-; Biology 13-; Astronomy 11- | Studying a $1 / 3$ in Chemistry and Biology |
| Leopold Gessnatz | M | 30 | 14 | 15 | 15 | 13 | 22 | 13 | Mechanics 11-; <br> Electronics 11-; <br> Mathematics 11-; <br> AK: City of <br> Pindowen 14-; T- <br> Fam Cars; Politics <br> 11-; Conversation <br> 11-; Dodge; Martial <br> Strike; 2 DC's | 'Jez' Studying a 1/3 In Mechanics and electronics |
| Avvey Dismann | M | 26 | 15 | 9 | 8 | 11 | 28 | 14 | Cooking 16-; <br> Accountancy 11-; <br> Hygeine 8-; <br> Mathematics 8-; <br> Oratory 8-; <br> Persuasion 11-; <br> Conversation 8-; <br> Acting 11-; <br> Etiquette 11- | Studying a $1 / 3$ in Cooking and Hospitality |
| Dr Horsa Evaard | M | 38 | 17 | 13 | 16 | 13 | 25 | 12 | Admin 11-; <br> Teaching 15-; Biology 15-; Physics <br> 15-; Mathematics <br> 16-; Oratory 13-; <br> Persuasion 8-; T- <br> Fam Cars | Administers the sciences facility |
|  |  |  |  |  |  |  |  |  |  |  |

Things I tried to get my group to do:
Contact the Tamaret order (They got in a fight with the first monk they met. Don't ask me how !)

Heal the Sheala (They didn't. After they left the planet he dies)
Scout the territory (They dotted lots of surveillance devices over the valley and put to recon sats in orbit)
Prepare a defence. (Yep they did this)
Meet the students. (Yep. Had a frat party. Joined a riot vs the government, blew their cover, beat up some cops)
Fight the bandits. (Yep. Aliens with an armoured ATV, combat suits, plasma rifles vs AK47's Who won ?)
Train the students. (Sort of did this.)
Scout the governments supply routes (Yes.)
Document evidence of the government's support for the bandits. (Barely)
Bug the communications network (No. Didn't do this so future missions will have to re-infiltrate the planet the hard way.)

Release some medical technology. (Not really)
Meet the public. (Not really)
Exit:
Hoople can provide some extra fresh provisions.

Some of the students would like to join the EC.

## Resupply options

A. Resupply at the GSV: 14 weeks catch-up to a GSV Curious pastimes plus seven weeks travel to Genbriki
B. No resupply. 7 Weeks travel to Genbriki
C. Deep space rendezvous with the fast picket Asymmetry. 'A' would not want to do this. It was the drop ship for Duncan (one of the PC's). He was responsible for destroying the drone launch platform that would fire at ' A ' during its retreat ( 1 favour to get this option). 6 weeks to rendezvous 2 weeks to Genbriki.

Scenario 2: 70 Years ago a transport vessel 'Convergence of principles' crash landed on a planet in the Genbriki system. The vessel contained large amounts of recon data together with munitions and some assorted 'affects'. Which planet is unknown, but it's PP comms is still open suggesting that the ship remains at least partially intact.

Mission: Search the Genbriki system for the crash site. Determine the cause of the crash. Exercise extreme caution. Recover as much of the cargo and critical systems as possible. Recover ALL transit packed items unopened. Recover PP Twin. Recover any portable operating systems in the ship. Destroy any remaining equipment. Return the recovered equipment to the Supply vessel 'Point of origin' currently stationed at the Donnel Habitat.

Details: The 'Convergence of principles' crashed on an uninhabited desert planet close to the sun. The planet is in-hospitable. Its day period lasts only 4 hours. Its rotation is extreme and correolis forces drive a limited weather system to generate dust storms on the daybreak boundary. The ' CoP ' is half buried in light sand. The sand is mainly iron and sulphur oxides. The atmosphere is unbreathable and the dust itself is an irritant. The 'CoP' crashed when it was attacked by an Azmat Coven drone. The deploying vessel was destroyed and itself
has crashed on a moon of one of the larger planets. The impact site for the Azmat vessel is far too small to be the freighter. The attack drone is still active on the freighter. The drone was intended to destroy the crew to enable the Azmat ship to recover its cargo containing a codified geni-type for the nano-virus. There are in-active nanites contained in builder chips in the cargo. They only need be plugged into a nano-factory to create plague-nanites.

There is plenty of opportunity for a firefight in this scenario. Increase the number of drones if you want to make it challenging. This scenario is intended to be a bit Alien-esq. You can also build up a bit of paranoia about the risk of plague infection.

Things to do:

## Scout the system

Scan the ship (slightly radioactive)

Find dehydrated corpses.

Decode the cargo manifest (plague nanites)

Find doors closed that were left open (something's out-there)

Assorted drone-made hazards (loss of contact with AL due to hull ionisation ?)

Fight the drone/s

## Return to AL

Whatever they do they should NOT put a plague nanite creation chip into a natite factory machine and create a load of plague nanites. That would be bad. (Ed - Coincidentally I was reading "The neutronium alchemist' while running this bit. Hence the choice to make the plague a 'neural sequestration virus'. It hacks into the brain and inserts desires to spread the virus amongst other nasty side effects. Treat it a bit like vampirosy and you won't go far wrong.).

Scenario 3: In defence of the Argok.

This was quite a long winded scenario. It was intended as a free-form type 'Design a planetary defence net' session. It turned into a long social interaction between the group and the locals. The planet has a society that was 'engineered' to support a wealthy Georgian duellist - landowner culture. The planetary technology level is actually quite high, but not evident. Every day life lives far below the technologically possible. This makes the environment very easy to sustain. The industrial sector has been cut right back to leave a mostly agricultural base operated by a small number of the servant class. The servant class is maintained by careful education to ensure that they are happy with their lot in life. The morality of this may be dubious, but then the first generation that settled the planet agreed to the terms and condition because that's what they wanted. It's only their children who are now bound by the regime that they accept without question because of the careful indoctrination they receive in school. It is possible for someone born of servant class to pay for higher education and get into the military or government jobs that pay well. It's just that no servant class household would ever consider suffering the kind of poverty that they would need to live in order to save that amount of money for a child who would most likely be quite happy working the land. Servants are not treated badly. They are just sub-servant.

The characters are invited to assist the planet of Lansdown in the development and deployment of a system defence network. The planetary government has been recently formed. The planet is human based. The planet has a short and relatively peaceful history dating back to just pre-embargo.

With the opening of trade routes and their close proximity to Chiqow space they would like a defence system to support them as they begin to establish their off planet assets. The characters are the front line of the EC in this contact and can ask for whatever EC assistance they feel is warranted.

The meeting. (Landsdown will send a 'space shuttle' type vessel to meet AL before he gets into orbit)

The hunting party.

Maffie range (mountain) wilderness preserve.
Women don't hunt Avery (too dangerous).

Part has to join the Hunt federation (Must use federation approved weapons.
Must advise the federation of any wounded animals. Good wilderness etiquette.) All the lodges around the park are privately owned. Anyone can hunt, but the rules make it almost impossible for anyone but the rich.

A servant gets hurt.

Loss of communications (Dark side, no recon probes).
The dinner party
Guests: Varvakian Roosemont the Internal security advisor;
Lady Quillian Roosemont;
Entoy Rafan the Technology advisor;
Lady Parain Rafan;
Lady Frail Tentail;

Chimyoy Vepp the Education advisor;
Lady Arpan Aferton;
Barbriss Gar the Health advisor;
Lady Asmay Gar;
Lady Capella Gar;
Lady Frail Gar;
Johan Arber the Health advisors assistant;

Frasier Rahalle the Industry advisor;

Eppan Arber the Industry advisors assistant;
Lady Kayanna Thurston;
Favia Sommer, Retired army captain;

Lady Maya Sommer, Favia's granddaughter;

Pallo Mackain, Maya's suitor;
Lady Artaya Butterworth;
Karran Stohrst a steel works magnate;
Lady Phillipa Stohrst;
Marrat Focall an electronics magnate;

Artur Focall, Marrat's son;

General Pinon Casteele, Space defence;

General Semall Coven, Launch facilities commander;

General Paron Label, Wet navy;
Lady Comilla Ravell;
Captain Abernon Casteele, Army, Pinons son;
Keegel Thiidaall?

Louis Benka?

Captain Mayall Winterthorne, Submarine commander, stand-in for General Neritt Hanson;

The schedule

- Meeting with the Administration section logistics development planner "Tiber Frost". He will arrange for offices, residences inside the capital if required and the admin staff to get the project going.
- Meeting with the Admin-Sec duty assignment clerk. Arrange a security contingent for the offices, residence and body guards ?
- Meeting with the Technology Advisors project management board (Space defence project). Amon Marcoss (Man power), Benn Aferton (OTVs), Harrold Jase (Light industry), Carmen Insus (Heavy industry), Mateel Pierce (Finance), Vapp Reidel (Security), Olf Wherry (Transport). Each of these has an aide.
- Meeting with General "Pinon Castelee". Assigned to be the Chief of staff for the department that will run the space defence system. He knows about the current space capabilities.

A duel.

A factory fire (OTV engine burn test gets out of hand).

An assassination attempt (Poison gas weapons).
When I ran this scenario the characters were starting to assume that the swords and pistols being carried around were the only real weapons in use. As with most armies the personal weapons of each soldier is not normally
the pinnacle ot weapons technology. This part of the scenario could have been a very rude awakening. The characters unless they are wandering around in environment suits had better stay back or attack at range.

The attack will be made on any NPC politico friendly to the PC's. The plot in my game went as follows:

This is actually a crime of passion disguised as a political assassination. The target of the killing is one of Favia Sommers guards. The group of men making the attack have been told that Favia is to be killed and his safe robbed. The man behind the killing is a junior officer and love rival to the guard. He knows Favia and knows that he keeps a large amount of cash in the safe. The killing team have been recruited from a military weapons depot where the junior officer is stationed. The plan is to steal some nasty chemical weapons, storm Favia's coastal retreat and steal the money. The guard and Favia and many others will die in the assault. The Junior office will then kill all the accomplices with a firebomb when they are splitting up the money. There will be several clues as to what is going on, but the evidence that this is a political assassination will be too convenient for the authorities to overlook.

Poison gas: Dispursed from an emplaced cannister. The damage is in three sections, heavy through light depending on how much of a dose you get. Heavy is 4d6 NND does body @ Speed 6, 2 dice continue until treated, range $1 \mathrm{~d} 6 \times 8 \mathrm{~m}$ in turns 1 to 15 . Medium is $21 / 2 \mathrm{~d} 6$ NND Does body @ Speed 4, 2 dice continuing, Range $3 \mathrm{~d} 6 \times 8 \mathrm{~m}$ in turns 2 to 30 . Light is 2 d 6 NND does body @ Speed 3, 1 dice continuing, Range $8 \mathrm{~d} 6 \times 8 \mathrm{~m}$ in turns $3-80$

An evening dance ball.

Deal with a meteor shower
See a Chiqow scout enter the system (Backed up by a cruiser if attacked)

Suffer a Solar flare.

Technical difficulties:

Lansdown does not have a great deal of computer technology. They do have electronics and build 'hard-wired' analogue processors. These are large, expensive and time-consuming to build. They will expect a system that is heavily reliant on man-power to operate. This will then mean that the group must address security and control issues. This limitation has been deliberately built into the society. If the repetitive jobs were replaced with silicon-computer technology there would be a shift to administrative jobs needing higher education. This is bad in a society that was built to sustain a hereditary military life-style supported by simple agriculture.

System data:
Orbit Type Occupied Radius
$0 \mathrm{n} / \mathrm{a}$ Sun G4, Luminosity class III.
1 Inner None

2 Inner Fozine 104.7 Million Km

1. Inner
2. Inner Serpine w/ 4 moons 239.3 Million Km
3. Inner
4. Inner Rengadu w/1 moon 777.9 Million Km
5. Hospitable Lansdown 2932 Million Km
6. Outer
7. Outer
8. Outer
9. Outer Obyxy + Valyx 23038 Million Km
10. Outer
11. Outer Obaloo w/10 moons 91972 Million Km

The system has two gas giants, one habitable planet and four uninhabitable rocks. Two of the rock planets are very close to the single white dwarf star.

The Lansdown star is a young white dwarf with a steady solar output and limited solar storms.

The nearest planet to the star is Fozine, a large ball of rock. Fozine has a strong magnetic field, but its proximity to the star has caused any atmosphere to be blown away by solar wind. The surface is covered with molten lakes of metals. The planet causes a small tidal pull on the stars chronosphere. The pull is visible from a Lansdown orbit. This would result in more significant solar storms but the planet mops op most of the local solar wind. Fozine has no moons or rings. The Surface temperature exceeds $2000^{\circ} \mathrm{C}$ during the day and 1400 at night. At night the light given off by the 'cooling ground' is enough to see by (if you didn't go all crispy standing there). The day period is 7 hours. Planetary diameter is 14 x earth diameters. Fozine's year is ony 120 days long.

Next is Seperine. Seperine is also a rock planet. The planet has a thin sulphur dioxide atmosphere and a strong magnetosphere. Seperine is significantly further from the star than Fozine. It also has the distinction of being perfectly smooth (to the nearest 10M). The limited atmosphere has almost no weather system. The planet is 4 earth diameters in size. The temperature ranged from 750 to $500^{\circ} \mathrm{C}$. Its orbit is slightly elliptical. It's day is 52 hours long and its year is 400 days.

The third planet is Rengadu. It is a small ringed gas giant. Fairly close in orbital diameter to Lansdown, but with an orbit that is both elliptical and skewed from the plane of the ecliptic. Rengadu is rich in volatile gasses and has seven moons. The largest moon has an extremely low density.

Lansdown is approximately twice the diameter of earth with 1.3 G and a nitrogen, oxygen atmosphere. The surface is approximately $50 \%$ water. The planet has a weak magnetic field and suffers from a higher than usual radiation input. The planets population of 16 billion is concentrated into four super-conglomerations. The planet has a single small moon with only a thin atmosphere. The moon is in a high orbit and generates little tidal force.

Obyxy and Valyx are twin rock planets at significant distance from the star. They have intertwined helical orbits. Valyx is likely to have been a captured free roving planet since its composition is dissimilar from obyxy. They share a very similar atmosphere of mostly methane.

The outermost planet in the system is the gas giant Obaloo. Obaloo has 16 moons in various orbits. The atmosphere is a super-dense hydrogen, sulphur dioxide and Nitrogen mix. There are also small amounts of helium which may be extractable. Obaloo has an extremely cold climate and only a small metallic core.

Planet Lansdown data:

Low density 1.3G, Standard atmosphere, $50 \%$ standing water.
Population 16 Billion.
Government benign monarchy.

## Defence system suggestions:

Low tech solutions will be more sustainable. Limit the need for EC to supply technology. Ion accelerator's, Low orbit ECM weapons, Missile systems (30G acceleration), Nuclear warheads, Passive gravity detection, Active LIDAR.

High tech solutions in small strategic situations might be added by the EC. Gravity distortion technology, Fusion drives, Anti-Grav, PP comms.

EC might offer training via neural induction.

Consider-

Satellite systems: Positioning, Sensors, Weapons, Command and control, Safety features, Effective range, Communications delay, Autonomous actions, Number of units, Unit production time, Coverage and spacing.

System defence boats: Crew, size, training, speed, communications, co-ordination, organisational structure, range, maintenance, production time, re-supply / self sufficiency.

Ground based weapon platforms: Orientation, blind spots (moving), weapon type, range, energy source, locations, defence, targeting method.

Defence capable industry / assets: Law, Regulation issues, Finance, Training, Crewing, Enforcement.

Defence procedure: Plans.

Stealth, Defence in depth, Level of response, Pre-emptive strikes, retaliation.

Hire mercenaries?

## Resources:

Depending on how much strain the government is prepared / can be convinced to put on the economy the following resources can be made available:

$$
\begin{aligned}
& 600 \text { to } 2000 \text { Admin staff } \\
& 1000 \text { to } 12000 \text { Troops } \\
& 200 \text { to } 1000 \text { Military engineers } \\
& 200 \text { to } 4000 \text { Civilian engineers } \\
& 4000 \text { to } 18000 \text { Labourers } \\
& 16 \text { Technical design staff }
\end{aligned}
$$

# 4 Mechanical engineering plants <br> 1 Electrical engineering plant <br> 1 Chemical production facility <br> 1 Secure training facility <br> 2 Orbital transfer vehicles 

## 4 OTV flight crews

The Lansdown society.

Lansdown was an independent Earth colony. As with all the IEC's it was founded based upon a charter. The charter was layed out before the colonisation mission. The charter layed out the purpose of the mission and the type of settlement that would be founded. Everything from government, social structure, even demographics where specified and agreed to by everyone moving to Lansdown. The charter forms the planetary constitution. It's very big ( 394 volumes in hardback!)

The main method of transport on the planet is horseback. There are airships for long distance transport. They have a large fishing fleet. At sea there is a 10 mile long city ship used by the Argok as a base of operations. There is motorised transport, but very few major roads outside the cities. Most of the administrative function is based in a single large capital city. Most of the planet is agricultural. There are large tracts of wilderness preserve. Motorised transport consists mainly of small hovercraft carrying upto 20 people or articulated all-terrain land trains. In the cities trams and horses provide nearly all the transport. Outside of the cities there is no real public transport. The admin section arranges most transport on an as-and-when required basis. The administration of transport requirements is a very large job.

The population is split roughly $60 / 40$ between semi-skilled labourers and the ruling class. The ruling class is almost entirely military. The huge standing army is relatively well trained with no terrestrial enemies. The military operate large numbers of engineering, transport, medical services etc. This keeps them busy.

During the first settlement of the planet a number of regional governments were set-up. After some time there were conflicts eventually escalating to limited nuclear exchanges. All within charter limits ! Since then the governments have aggregated. Now there is a single planetary government.

With the end of the embargo Lansdown has asked for EC help in setting up space-based industry and the infrastructure to support it. Particularly the policing and protecting of space based commerce. It is anticipated that a branch of the military will secure the systems space allowing free trade to be established with other systems and for orbital manufacture facilities to be created.

Lansdown has access to: Fission power, Oil and coal fired (clean burn) power stations, Lasers, projectile weapons, blade weapons; Advanced chemical based medicines and chemical weapons; Radio communications; Fibre optics; non-sentient computers.

Lansdown has already developed chemical rocket launched 'shuttles' and has built three large cruisers. The three cruisers were built around a construction skeleton that became part of the ships. The ships are hidden in orbit around Obaloo. The ships are very slow by EC standards proably having taken years to reach the outer orbits. The ships are nuclear powered with extensive armour and bombing capabilities. They are not atmosphere capable. They have been kept a close secret even within the ruling class military. They are names: The general Aferton, The general Cumberknoll and The general Serenty.

Lansdown has 16 OTV shuttles capable of launch and recovery. They have an 18 hour turn around and use solid rocket fuel. This would appear as a lot of space capability for a planet without satellite communications or a large aerospace industry ! (clue !!)

The planet uses only limited short range radio. Most communication is though military owned (and monitored) optical landlines. Communications lasers are used for short distance secure communication by specialist military.

The planetary history has been edited over the course of time and cleaned up slightly.
The older people and the upper class generally like classical operatic music. The younger generation are into thrashy metal.

## NPCs:

Here are some of the NPCs that I found useful during the scenario.
The advisors to the Argok

Varvakian Roosemont: Varvakian is a kindly gentleman. He runs the government internal security. He is grey haired and probably due for retirement. He is married to the lady Quillian. They have a twelve year old son 'Koo'.

Atra Eric: Elder statesman. He is an expert accountant, with a deep understanding of the planets economic structure. He has a lesser grasp of overall politics and so has been out manoeuvred a number of times. He is single and not interested in anything much other than is accountancy.

Entoy Rafan: Entoy will be the groups first contact with the advisors. He is the technology advisor. He has very little knowledge in his field, but he is a great administrator and manages his staff well. He has an estranged wife Parain. Entoy was unfaithful with the lady Yempay, this is a 'public' secret amongst the capitals socialites. Entoy is almost always accompanied by his highly efficient assistant, the lady Frail Tentail.

Chimyoy Vepp: Chimyoy runs the government education system. He has recently been leading a large review of the education policy. He is switching almost all public funding into the sciences. This has made him unpopular, but is possibly a good move give the need for new skills that will be required to integrate into galactic trade.

Anton Castan: Anton is the youngest advisor to the Argok. He is growing a beard to make himself look more elderly. Anton is taking a slow and careful approach to development of the health service. He is shying away from leading edge developments that previous advisors have followed. He is courting the lady Frista Admai.

Barbriss Gar: Barbriss advises the Argok on the welfare system. He has a very balanced view of welfare, believing that the state should keep retired individuals in a manner to which they are accustomed. Some of his opponents view this as being soft on the aristocracy. Barbriss has a wife, Asmay and two daughters. Capella (12) and Frail (14). He is trying to arrange a wedding between Frail and Varvakian's son Koo. Varvakian would rather have his son wed Capella. Capella is Barbriss' favorite and he would rather have her find her own husband.

Liville Yasi: Liville advises the Argok on agricultural policy. He has a wife, Kallisa and a mistress, Jasbonn. Many of the other advisors envy him his position. Agriculture is considered the 'easy-life' department and he has two women.

Frasier Ravhalle: Frasier is the industry advisor. He has been forced to work along-side Entoy the technology advisor. He feels that his position of power is being undercut by the technology
drive that the Argok is pursuing. Frasier has no family. He is the last of his line and is a bit old for courting.

Humby Onribud: Humby is the adminitrative advisor. He runs the court and is responsible for the justice office. He is young and although he is regularly pursued by ladies of the court he has paid them little attention. Humby is possibly the most powerful of the advisors. He pursues a softly-softly approach and hopes he will be able to place himself in an even more powerful position later in his career. He intends to pick a wife that will give him some political advantage.

## Assorted friendlies-

Favia Sommer: Favia is a retired captain. During his career he was popular and made many political friends. He studied political science, economics and military strategy. For this reason in retirement he still advises a number of people. He regularly holds parties and brings together politically active people and 'fixes' things. He is also an excellent fencer. In fact he has some regular fencing students.

Lady Kayanna Thurston: Kayanna is an administrator. Although there are quite a few women secretarial staff even amongst the ruling classes Kayanna is probably one of the most well bred. She will be provided as the player characters personal assistant and liaison.

Maya Sommer: Favia's granddaughter. Maya is very friendly she stays with Favia at her parents request since they hope she will marry well by associating with all of the big political figures that come to Favia. She is quite strong willed. She has some definite opinions on many issues, but agrees with the rather sexist social structure. She has a suitor Pallo Mackain who will keep a slightly jealous eye on her.

The Hunting party-
Keegel Thiiadaall: Son of the air standards authority commissioner general. Strong. Attached to the Admin-sec-internal, a security department responsible for maintaining the security of the capital city. He is currently on leave for two months. Keegel is part of the military and will wear military uniform most of the time as is common for most of the 'ruling class'. He's a keen huntsman. If the 'aliens' are friendly he might invite them along on an 'Avery boar' hunting trip. He is good natured and proud of his heritage.

Louis Benka: Second son of an air fleet administrator. Louis is a good horseman. He is attached to the Admin-sec-internal where he met Keegel. They are good friends. He has two weeks leave remaining before he has to return to duty.

Tarkahn Gardener: Son of an army engineer. He is bright and driven. Because of his background he is considered 'lower class' by some of his colleagues. His dedication and drive are recognised by his military superiors so he will probably do better than many of his fellows would expect. He will use the hunting trip as a brief rest before continuing his incessant hard work.

Nevagra Mansun: Third son of the palace security's drill sergeant. He is a disappointment to his father. Nevagra is trying to ride the coat-tails of the more successful members of his family.

Kych Hornbull: Son of judge Bravent Hornbull, a powerful and respected man. Kych and his father have a serious feud about military politics. It has lead to blows in the past. Kych is an excellent swordsman. Kych's amour the lady Ezmay will also be in the hunt entourage.

Lord Turink: Lord Marell Turink is a retired training officer. His wife is ill and will probably not live out the year. He has a death wish. He is a good swordsman and an accurate shot with a pistol. He is however physically a long way past his prime.

The Hunting party entourage-
Lady Artaya Butterworth: Artaya is one of the five 'riders in the park' that the characters may meet. She is quite attractive and enjoys the company and attention to go with her position and appearance. She is the eldest daughter of the senior economics planner. She will regularly have a number of male escorts casually vying for her attention.

Lady Ranseen O'Connor: Ranseen is a good friend of the lady Butterworth. She is a keen hunt follower. She is the youngest of three daughters and has no anticipation of a political marriage. She is the daughter of a communications administrator.

Servants: The entourage will have a good twenty or so menial staff to erect tents, cook food and do the general 'work' required behind the scenes at the hunt.

The prey-

Avery boar: The Avery boar is a mean tempered but quite intelligent prey. It will use local landmarks to advantage. Where possible it will leave false trails, lay in ambush and attack from the rear. STR 25, DEX 16, CON 20, BOD 14, INT 8, EGO 4, PRE 15, COM 4, Pd 2, Ed 2, Spd 2, REC 8, END 60, Stun 50, Run 12", Swim 1".

OCV 5, DCV 5. 1 Level of shrinking (always on), 2d6 HKA Tusks @ +1 OCV, + 2DCV when dodging, AK Local forest 14-, Concealment 12-.

To hunt Avery boars you have to join the hunt federation and agree to the federations rules. This includes using exclusively the proper weapon, a boar lance: 2" Stretching Always on (cant use against close targets !) Zero END, -2 OCV with 2d6 HKA Armour piercing.

Horses used in the hunt are given 4/4 armour on a 15- Activation from underneath.
Landsdown palace security-

The average palace security guard is very keen and highly trained. They are well motivated and kept in constant training. They do not however anticipate any threats to the Argok, only to lesser politicos.

STR 14, DEX 11, CON 16, BOD 14, INT 13, EGO 13, PRE 18, COM 10, Pd 3, Ed 4, Spd 3, REC 10, END 40, Stun 40, Run $8^{\prime \prime}$, Swim $4^{\prime \prime}$

Body armour 15/15, Activation on 15-, OIF
$25 \%$ resistant damage reduction vs Swords linked to armour (ie also activation) OIF

Radio listen and transmit OAF hand radio.

Life support: Poison gasses OAF gas mask (-1 Dex \& Int when worn)
Detect poison gasses IAF gas warning beeper.
2d6 HKA OAF Foil, Reduced penetration +1 OCV
1d6+1 RKA OAF Long pistol, + 1 Stun multiplier, 7 charges, 2 clips

Martial arts with foil: Martial block, Offensive strike, Defensive strike.
HTH Martial arts: Martial dodge, Martial grab, Martial disarm, Offensive strike, Choke hold, +2 DC's
+2 DCV vs all attacks due to good training)
+1 Range level
+7 defensive presence
+2 Sight perception
Other skills: KS Military history 14-, KS Weapons 16-, PS Soldier 15-, AK Palace 14-, Persuasion 11-, Tactics 11-, KS Security procedures 15-, KS Terrorism \& Counter-Terrorism 13-, Wfam Foil, Wfam Rapier, Wfam Handgun, Wfam Rifle, Tfam Car, Tfam Horse, Climbing 14-, Stealth 13-, Concealment 8-, Interrogation 8-, KS Chemical weapons 8-, KS Political figures 8-, Politics 8-, Combat riding 14-

## The ARGOK.

The ARGOK is a surgically modified girl. This is kept secret. The ARGOK is usually considered to be male. The ARGOK appears with a purple exo-muscular body suit. The head / helmet is heavily modified. Without prior knowledge it is possibly not obvious that the ARGOK is human at all. At age 14 the ARGOK is impregnated from a cloned store of sperm cells. The child is born in secret, then raised in isolation in the ARGOKs city ship. The ARGOK is not disturbed by being different. This is mainly due to the genetic make-up. Effectively the ARGOK is a partial clone of the previous ARGOK (Mono-culture monarchy).

The ARGOK acts as emperor for Lansdown, advised by experts in Security, Economics, Technology, Education, Health, Welfare, Agriculture, Industry and Administration.

Scenario 4: The 'SS Forward thinking' sends a distress message. The characters are routed to assist. The major part of the crew have been captured and imprisoned on the planet Twillain. The Planetary government is a military Junta that does not accept the rationale behind the embargo. The Characters should try and rescue the imprisoned EC Crew. Further assistance is on the way in the form of the Cruiser 'Entropic Maxim' which will be able to assist if the players are themselves captured. The SS FT crew are due to be executed and a delaying tactic may be equally usable.

Twillian troopers are very efficient, but use sophisticated 'low lethality' weapons. To stand a reasonable chance of beating the Twillian troops the characters will have to make a difficult decision about their level of response. The Twillians have better 'low lethality' weapons and good armour. To ensure victory the characters will need to use lethal force vs troops that are committed to not taking life. Using softer tactics the characters will need to be very careful and use brains to avoid capture.

The prison complex itself consists of two nearly identical compounds with a single high strength holding facility linking both. The facility gets power from two isolated geo-thermal power sources. Water enters via two isolated sources. Food supplies are isolated for 2 days before being passed by security. Sewerage outfall is irradiated then passed into an 'organic reactor' to produce methane and fertiliser $80 \%$ of which is recycled into nearby low security farms.

The outer compounds consist of three 12 m high fences made of a smooth slightly elastic material. The material is ballistic proof ( 15 Resistant PD). It is fire retardant, but not resistant to quantities of acid. It has 7 body. If broken the material will split, rolling back to the nearest supports which are spaced 10 m apart. The fences are 5 m apart. The ground between the fences contains a concrete 'tank trap' designed to stop heavy vehicles driving across the perimiter. The trenches contain sonar detectors (14-base perception).

Inside the fence each compund has: Geothermal pump for hot water and electricity, Secure storage warehouse, vehicle depot, New arrivals building, security 'bunk house', Gate house, Security monitoring station, Primary communications building, Sewage plant,

The crew of the SS FT are being are a holding facility. Although most of the compounds in-mates are given a fairly free reign the EC prisoners are kept indoors. There are a number of decoys and both decoys and real prisoners are in shielded areas. A constant jamming signal covers the compound making low band RF communications impossible (N-Laces malfunction). The Twillians use short range IR signals

The Twillians have not yet developed their orbital capabilities. They have launched large numbers of communications satellites. Most of the satellites use tight beam lasers to communicate to each other and narrow beam microwave transceivers to ground stations. This makes intercepting or jamming communications generally very difficult.

The Twillian society is quite stoic. It was hit very hard by the Embargo. The remains of its trans-system industry can be found on the outer planets. The population suffered a marked increase in its death rates when its off planet manufacturing resources had to be abandoned. The planet is now making a recovery, but the systems population is only one half of its pre-embargo level. Also the on-planet resources are relatively poor. The loss of asteroid and gas mining will make re-establishing its outer-planet colonies difficult.

The planets bio-diversity is also very low. Most of the surface land mass is used for housing or intensive agriculture. Power is provided by ocean thermal current stations on a massive scale.

Most of the planets transport requirements are provided by underground magnetic shuttle trains. Air transport is also available using solar powered super-gliders.

Chemical resources are very limited. Anything that can run directly from electrical or solar energy does.
During the start of the Embargo the Twillians were involved in a short-lived armed conflict, but their space based weapons systems were insufficient to protect their own system space. This was in part the reason for forcing the embargo on them. Any ship could have entered the system and spread the plague infection without much opposition.

The SS FT crew will not be held at the compound indefinitely. The trials are planned to take place in the capital city. The trial will revolve around the issue of weather the Embargo can be proven to have saved more Twillian lives than it cost. The SS FT crew are not themselves held personally responsible, but Twillian law holds that voluntary membership of any group or organisation over which the member has any sway makes the individual responsible for the groups action in whole or in part. If a significantly large case is built against the EC the court could rule significant sentences against all members of the EC who were alive during the Embargo.

Twillian courts are presided over by three legal experts. The police present a case based upon the established facts. There is no separation of prosecution and defence. Anyone may present evidence to the court if the legal experts, the police or the defendants believe it is relevant. There is no presumption of innocence in Twillian courts. The sentence is weighted based upon the strength of the evidence and the scale of the crime. If there is reasonable doubt as to the guilt of the accused the sentence will be one of monitoring and prevention possibly infringing the accused liberty.

If the Twillian court decides there is definite case of wrong doing and that the EC was responsible for significant loss of life the sentence is likely to be one of 'life-time public service' with the stipulation that the guilty parties may not have any further contact with the EC.

If the court decides that there is a substantial case or that the EC was responsible for some loss of life the sentence is likely to be financial penalties. Since the EC does not possess any Twillian money the accused would need to stay on Twillian and work while paying increased taxes. The EC may find a way to 'pay off' some of the debt with preferential trade.

If the court decides that there is a poor case or that the EC was responsible for only a limited loss of life or significant hardship the sentence is likely to be a financial penalty made against the EC as a whole rather than the accused in particular. In this case the court would have to determine if the accused can be relied upon to secure the penalty from the EC.

Scenario 5: Abandoned planet. Contact has failed to have been established with the embargoed planet 'Korel'. The planet had a thriving population prior to the embargo ( 5 billion Plus). On investigation there are some remains of the previous occupants, but no people left. There are hidden bunkers containing the genetic material of the last survivors and accounts of the downfall of the planet. The local flora and fauna had always been voracious and largely uncontrolled. One of the more dangerous predators under threat from the human habitants exhibited a significantly higher intelligence that had been anticipated. They modified local fauna to produce fungal spores that caused sickness and infertility. The population did not have the technology to artificially gestate and sealing a population away only allowed a small portion of the population to survive for a few decades. The predator animal still exists, but though intelligent is not threatened and so has reverted to its normal roll in the ecology.

Scenario 6:The planet 'Tuolegg' has survived the embargo period relatively well. The planet had a limited population of highly educated individuals. The planet was a colony of a remote system that is no longer interested in the colony's research. The colony has a fusion reactor that was decommissioned at the end of its life span. To repair and bring the reactor back on line requires spares and some education. In addition the population would like some human genes introduced into its culture. The population will be friendly and polite in broaching the subject of sex / sperm / egg donation. One of the indigents will request that the players contact "The order of the fallen" with a data disk containing some information on the earth system. The disk catalogues a technology cache that was moved to Mars before the embargo.

Scenario 7: The O.F on receiving the disk will quickly become agitated. The catalogue includes some nano-viral technology. With some collusion from the EC minds the characters will be sent on a long haul to the earth system (On the GSV tightrope) to make contact with the O.F in the SOL (Earth) system. Earth is uninhabited, Mars is missing. The only sign of life is a colony on the Earth's moon. Lunar O.F will help the players and take the catalogue, but on consulting the history books they will say that during the start of the Embargo earth and Mars were starting a terrible war. Both sides had weapons capable of significantly damaging the planet surfaces. Most of Earth's population were moving to Lunar where the money was (pre-embargo). The war never developed. Mars vanished and the evacuation to Lunar continued. The whereabouts of Mars was forgotten about as an unknowable mystery.

Scenario 8: As characters finish their investigations on Lunar the GSV Tightrope gets a high priority message from GSV 'No conclusions'.

From: River class GSV 'No Conclusions’

## To: River class GSV 'Tightrope’

Hello T. I must say you choose a poor time to be in such a backwater. Steely Glint has declared itself independent of the EC. The SA have taken up residence and non-SA sympathisers are being evacuated.

The characters are asked to assist in the evacuation. As they are doing so the characters should explore the ship as much as they can get away with spreading surveillance micro-spheres. Each is as small as a dust particle and records 1 hour of audio and movement. Each hour some of the spheres start recording. There are 60 million spheres to be dispersed. They can be scattered onto the floor where they will be traipsed throughout the ship. Later they can be read in the months to come is and when they are recovered from anyone walking off Steely Glint with spheres some on them.

The characters may be captured and interrogated before being released. SG will not harm them.

## Scenario 9: EC Politics

The group is approached by Lord numeric of the first order Hugain as Ambassadors of the EC requesting that they find a good reliable AI to progress his theory about the Mars disappearance. It involves a strain of Metamath that is currently disproved, but he believes that some parts of the theorem must still have some relation to an as yet un-found branch of meta-math. If his theories are correct the meta-math could lead to an immensely powerful weapon, and he would rather have an unbiased EC mind researching the defences than any one independent power.

Scenario 10: Visit to viral-life planet to talk to the gia-entity.
Scenario 11: Encounter with the deep-space habitat "The thain of the un-being". (Cuthulu-esk scenario).
Scenario 12: Capture the daughter of a deceased felon. Her genetic material unlocks a data store on lunar. Why ? - The vault contains pre-embargo data about a system where a major 'celestial event' was observed. The GSV Personal Indemnity has asked for information on this and several GSV's would like to do this favour for PI in order to bring it back 'into the fold'.

Scenario 13: Virus. The nearby mining colony of Campilo, a human centric settlement covering some 200 asteroids reports (wrongly) an outbreak of a strain of the Azmat virus.

The colony government has shutdown the transport system, but given the number of foreign ships in residence they will be unable to prevent the virus spreading beyond the colony. They request EC help. AL is the first EC ship on the scene.

In fact the rumour of the virus was leaked by a media publisher before the government could fully investigate. The ensuing panic is disrupting the government so much that it cannot now gather any real evidence.

As the investigation proceeds AL will determine that four ships left the possibly infected areas.
It will become obvious that the apparent spread is not consistent with the Azmat virus since it has not affected any verifiable non-human neural networks.

The virus is not self sustaining.
The virus patter is will be traced to it originating in the Beonar family corporation.
An assault on the family quarters will find the family all dead. They will have curcummed to a nano-virus spread from their own nano-factory. A foreign chip of un-traceable origin is running in the factory.

Evidentially this is a murder case best left to the government (or another scenario is you want to try and run it).
Scenario 14: Confusing the issue.
AL receives notice via a GSV bulletin that a nearby-ish planetary government that is only just becoming capable of interplanetary travel has intercepted and captured a Chiqow scout on the planet surface.

The system is called Vencuuta and the government resided on the fourth planet in the single sun system. Both the planetary government and the Chiqow are known for their violent natures. If the situation is not dealt with almost certainly the Chiqow will find out that one of their number have been captured and retaliate. The GSV has suggested that a well equipped team could intercept and rescue the scout. This might help stay off any large scale conflict.

Vencuuta has some orbital platforms and a few dozen interplanetary vessels. Most of its weapon systems are planetary, but quite advanced. The government will be taking precautions against rescue attempts, but may still be unable to stop a rescue attempt. Alternatively the party could try and negotiate with Vencuuta and advise them of the Chiqow's far superior technology.

The Chiqow scout vessel Emnupta is trapped under a lava flow from a still erupting volcano in a sparsely populated region of Vencuuta. The Vencuuta government know the region the vessel is in but can't find it. They have assumed that the vessel is well hidden, but do not realise that it is traped. Given time they will find it and may be able to make significant technology advances if they can recover it.

The Chqiow alien itself is in a biological research facility with hastily added security. The facility is not designed as a prison, but for dealing with bio-warefare research. For a determined rescue team armed with Culture-Tech the most severe risk is possibly releasing dangerous weapons by accident.

The Vencuuta government controls $98 \%$ of the planetary surface. Two separate revolutionary armies occupy minor cities on the same continent. A low level war of attrition is underway between all three groups. The Vencuuta planetary government is holding off full scale bombardment purely because of the cost. They plan to use low level bio and chemical attacks in the near future.

## The Virus.

The virus is stated as:

OECV 5, Attacks at speed 1. 4d6 Mindscan for aiming for EGO $+10+1$ dice delayed effect by one turn. +1 dice delayed by 1 hour, +1 dice delayed by 1 day, +1 dice delayed by 1 week (total of 8 d 6 Mindscan). Zero endurance, Persistent, Sticky, and Zero Range.

The Mindscan is maintained against the target. I.e. the throw off roll does not improve with time ! The sticky affect is spread by physical touch or close contact through air (less than 5 meters).

When the Mindscan achieves EGO+10 on its target the nano-virus has attached to the brain functions and the effect will trigger.

Payload multi-power (1 affect per phase)
a. 12d6 EGO attack triggered by Mindscan lock-on. 1 shot affect on target. The target brain goes into neural shock and shuts down.
b. $1 / 2 \mathrm{~d} 6$ Ego drain triggered by unconsciousness and Mindscan lock-on. Zero endurance, continuous, sticky, zero range, Recovery per year, only affects EGO vs Mindscan.
c. Mental awareness (usable by target), zero range, sticky, 11- activation (roll once), The target can sense the presence of the virus by touch.
d. Mindcontrol 126d "Spread the virus" Activation 11- (Roll once). Zero End, persistent, sticky, Zero range.
e. Mindcontrol 10d6 "Secretly aid the Azmat wikan" Activation 8- (Roll once) Zero end, Persistent, Sticky, Zero range
f. 1d6 Major transformation into a virus factory, sticky, Zero range, Zero end, Persistent, Continuous, Cumulative 1 dice per day.

## NPC's

## Second Alliance Security

Breakfall 14-, Acrobatics 11-, Acting 8-, Combat driving 14-, Deduction 12-, Interrogation 16-, Paramedic 15-, Security Systems 14-, Shadowing 11-, Stealth 16-, Streetwise 14-, Tactics 15-, Transport familiarities: Flyer, Shuttle; Area Knowledge: Steely Glint 12-, General GSV layout 14-, Weapon familiarities: Plasma Rifle, Assisted Weapons, Grenades, Heavy Rifles; Familiarity with Zero-G movement.

Light weight mobility armour 30/30 Hardened, $50 \%$ Pd Damage reduction, $+25 \%$ vs Impacts/Falls, $25 \%$ Ed Damage reduction ; Life support Radiation.

N -Lace (Mindlink to ship)
Embedded Nanonics: 3d6 Aid to body triggered by zero body, 1 charge.
Embedded Nanonics: 3d6 Aid stun, 1 charge.

12 mm Micro shell rifle (GMS): $4 \mathrm{~d} 6+1$ RKA, +1 stun multiplier, 40 rounds, 4 clips, +2 OCV vs warm targets, + 2 range levels.

## Second Alliance trooper

As above except -
Trooper armour: 30/30 hardened, $50 \%$ Pd damage reduction, $75 \%$ Ed Damage reduction vs heat based attacks, 30 Power defence vs electric / magnetic attacks, 60 Flash defence sight, Radio listen and transmit (Encrypted 20), Infra-red vision, Low-light, ultra violet, x-ray. Life support:Breathing, Radiation, Pressure, Acceleration (to $17 \mathrm{G})$, Detect radiation, +40 Active Points of Body, +60 AP Stun, -6 " Knockback

Laser rifle: 26 d 6 EB, No Knockback, OCV 7, No Range penalties, + 2 OCV operator aimed, 200 charges, Invisible effects up to 14 dice.

Ascending light conference drone.

AL's conference drone is the easiest point of contact for the crew with AL. The drone is a small disk about the size of a dinner plate. Although it has a featureless silver surface it can emanate a coloured glowing field that is linked to AL's emotions. The colours are standard for emotional context across all of the EC's drones.

STR - 20 (minus), DEX 14, CON 45, BOD 15, INT *, EGO *, PRE Zero offensive, COM 10, Pd 0, Ed 0, Spd 6, Rec 5, End 40, Stun 40.

* Use AL's stats if the Mindlink is up. Otherwise INT 5, 1 EGO and programmed to return to base.


## 5/5 Armour

Flight 3" +2 Non-combat multiples, Zero End, Persistent, Invisible effect, Always on. (Field propulsion), Not in vacuum on $2^{\prime \prime}$ and NCM.

Mindlink to AL, Zero End, Persistent, Always on.
8" Knockback resistance

Life Support: Breathing, Heat, Cold, Vacuum, High pressure, Radiation, Disease, Eating, Sleeping, Excreting.
40 AP shrinking, Zero End, Persistent, Always on, Minus 8 to perception, +8 DCV = DCV 13 at range,, +12 " knockback (Total +4").

## Bump of direction

Backup AI module: Skills: Fly A to B 11-, Combat piloting 11-, Concealment 12-, Stealth 14-; Programs: Return to base.

Ascending light servitor drone.
AL's servitor drone is for maintenance. It is silver and teardrop shaped. The pointy bit is the front.

STR 20, DEX 13, CON 35, BOD 40, INT *, EGO *, PRE 10, COM 10, Pd 0, Ed 0, Spd 6, Rec 10, End 80, Stun 40, Run 0", Swim 4"

Mindlink to AL, Zero End, Persistent, Always on.
Flight 6" (Field propulsion or AG) $+12^{\prime \prime}$ in gravity (Anti-Grav)
20/20 Armour Hardened.

10/10 Forcefield, 1 Facing only, Zero End, Persistent.
Life support: All

8" Knockback resistance

Bump of direction
Backup AI Module: Skills Fly A to B 11-, Combat pilot 11-, Concealment 12-, Stealth 14-; Programs: Preserve crew, Repair AL, Return to Base (AL)

Mechanics 18- [14- without Mindlink]

Electronics 22- [18-]
Paramedic 18- [12-]

1d6 Aid body, only to repair AL Nanonic systems.

Ascending light mindstem
The mind stem is the 'brain' of AL. It appears as a round ended matt black capsule with contact points for all the ship data feeds.

STR5, DEX 6, CON 40, BOD 20, INT 65, EGO 45, PRE 25, COM 10, Pd 0, Ed 0, Spd 10, REC 5, End 80, Stun 100

10/10 Armour, triple hardened.
30/30 Forcefield (NB does use end !)
5 EGO Defence

3d6 Area Effect 4 Hex Aid Body + Stun, Zero End only vs Meson weapon damage.
5 Flash defence all sense groups.
+10 Flash defence hardened on sight group.
Mindlink to any local (planet area) N-Lace / Drone.
Flight 1"

Life Support: All
Bump of direction

Eidetic memory
Absolute time-sense
Faster than light travel.
20 AP Growth, No secondary stats.
10 AP Cosmic power pool (field manipulation) Requires a skill roll.
Field manipulation 16-, Sociology 11-, Beaurocratics 11-, Combat piloting 21-, Computer programming 18-, Concealment 12-, Conversation 14-, Cryptography 16-, Deduction 14-, Electronics 18-, Familiarities: Flyer, tube-rider, starship, ships weapons, heavy weapons, personal weapons; Forensic medicine 14-, Forgery 17-, High society $15-$, Interrogation $16-$-, KS:Aliens $14-$, KS: Ships systems 18 -, AK: Known galaxy 18-, Languages: All known languages fluent w/accent, Lip reading 12-, Mechanics 18-, Navigation 22-, Persuasion 13-, Meta-math 16-, Physics 18 -, Chemistry 18-, Biology 13-, Nano-tech 16-, Field dynamics 18 -, Security systems 13-, shadowing 14-, stealth 13-, Survival 8-, System ops 18-, Tactics 18 -, Weapon smith 16-, Find weakness (any attack) 13-, Lightning calculator, Perfect pitch, Simulate death, Speed reading.

## Chevron

If the player characters include non-military types some personal protection may be advised. When I GM'ed I put the least violent PC in charge-ish and gave them a Chevron for escort. This allows the players to get into a few fights without getting themselves killed. They enjoy the fight even if they are 'playing' the Chevron. The Chevron is a standard piece of military hardware. It includes a PP link and some on-board AI as such it is quite rare and not to be abused. The Chevron can exhibit a reasonable level of intelligence, but only in a very limited field. It can understand orders and even picks up the 'tone'. Being an EC based AI it will show some degree of reverence for life (it won't disobey an order to kill though). The Chevron is a good soldier, but not good at much else. The Chevron is linked to a 'command module' a tick-tack box sized communications interface that can weld itself to the side of a players head temporarily allowing the player to 'take-over' the Chevron getting all its skills as well as their own. The player character can continue to operate at half DCV. At any time as a zero phase action the character can let the Chevron carry-on on its own or take-over again (at the start of a phase).

I also had two Chevrons concealed inside Ascending light behind a solid wall panel, just in case ! Slaved to Ascending light.

Chevrons have two configurations: Horny goat configuration (tail forwards, legs with reversed knee joint) or Monkey configuration. The tail is prehensile and can be used to carry weapons or operate control panels. There
is a comms interface just short of the end of the tail. The Chevron can link to hardline communications on-ship while remaining on guard. This allows it to get messages direct from the ship while still being in contact with its 'owner' or on guard duty.

STR 30, DEX 15, CON 40, BOD 60, INT 5, EGO 3, PRE 30, COM 10, Pd 0, Ed 0, Spd 5, Rec 20 \{No long term body recovery\}, End 130, Stun 60. Run $6^{\prime \prime}$, Swim 0 "

Disadvantages: No Fine manipulation, Slaved to Command module, Code of conduct - Protect owner Common Strong.

Armour 30/30 Double hardened.

Change Environment 8" Radius - Running lights

50\% Resistant damage reduction vs Lasers, Plasma and Thermal weapons.

15 Active Points Density increase, No Strength bonus, -3" Knockback, No Pd/Ed. 800Kg
Enhanced senses: High range radio, Radio listen and transmit, Infrared, Radar sense, Spatial awareness (Mass detection) $360^{\circ}$ non-targeting.

Detect radiation, Detect poison gasses.
Extra limb (tail)
2 Points flash defence Sight group.

20 Power defence x 2 hardened (EMP shielding)
Plus 5 dice HandAttack's

1d6 Hand Killing Attack (Tail)

Life support: All
Mind link to Command module (Any range including inter-system)
1" Stretching (Tail)
+6 DEX when not using tail (1 phase to change, no secondary stats)
Simulate death (power down), Combat sense 11-, Absolute time sense, Breakfall 14-, Climbing 12-, Cryptography 14- (Radio signal encrypt / decrypt), Fam: All modern weapons, Navigation 16 -, Stealth 11-
+3 OCV with all modern weapons, +2 Range skill levels with all firearms
Equipped with:

12 mm Microshell Rapid Fire 'Burst pistol' ( 4d6-1 Ranged killing attack, 10 shot autofire, +2 OCV vs warm targets, +2 range levels vs solid targets OR 5d6 RKA Hex effect 4 hex range uses 10 charges, 60 rounds per clip)

9 mm Armour piercing 'Low Cal Burst pistol' (3d6 RKA 10 shot autofire OR Hex effect 4 hex range Armour piercing 5 shot minimum, 300 rounds per clip)

## EC Ships.

In order of size
(Old) Quarry class.
Forest class

River class

Island class

Continent class

## Steely Glint. (River class GSV)

SG was the operational HQ for most of the ground troop training. SG is planning to leave the EC proper and become an independent base for the Second Alliance. SG has been selectively moving crew out who are not likely to sympathise.

Most of SG's environment is Oxygen/Nitrogen at about 1.2 Standard G. It has some very limited space set aside for High G Sulphur di-oxide based living quarters. The atmosphere is increasingly regimented as more and more SA take up residence.

## Finer Things (River class GSV)

On-board the Finer Things a relaxed atmosphere is being cultivated. FT has decommissioned $90 \%$ of its drive mass and weapons system to extend its hull. It supports and extensive marine / coastal environment. Due to the low engine capacity FT is planning to use a lot of ferry transport. To this end it has four decommissioned destroyer hulls converted to slaved ferries. They have various degrees of engine enhancement. FT has a limited population but a large number of animal life forms. Many of the population act as land-stewards.

## Personal Indemnity (River class GSV)

PI is a research vessel, having very little regular contact with the remainder of the EC. PI has a very large sensor array and a large complement of automated reconnaissance probes. It has a limited population since most people do not like to be isolated from the rest of the EC for long periods. PI spends most of its time hunting uncharted space between regularly frequented routes.

## Curious Pastimes (Forest class GSV)

CP has reduced the capacity of its repair and construction bays. Its main weapons systems are still intact. It retains its high drive / mass ratio. The CP is being used as a super-lifter to transport vessels across the span of the decommissioned fleet. CP is close to FT and they plan to co-operate their transport requirements. The CP environment is balanced Pastoral and Urban with a relatively high population count.

EOI has an almost reclusive reputation. EOI was a key vessel in the Emman war. The ship undertook a military de-commission long before the Embargo was over. It has not explained its reasons, but it was involved in the Nocoman conflict (62676.2). Many gene-engineered humans were born on EOI during the Nocoman conflict though the many children have spread out amongst the other ships there is still a strong presence of families that can trace their history back to originals living on board.

## No Small Thing (Continent class GSV)

NST has always had only a limited offensive capability. It is currently constructing a new River class GSV (Name not decided). Its mainbay is currently supporting a high pressure Nitrogen Silicate environment. The main part of its crew complement are still trying to liase with the environments in habitants a race encountered just prior to the embargo. The race which is also currently unnamed are very slow but seemingly intelligent. The NST's main mission is to establish communication with the race which communicates using pizo electrical communication.

## Likely-as-not. (Quarry class GSV)

The Likely-as-not is the sister ship of Less-is-More. Likely-as-not has been following a long elliptical path for most of the embargo. There are two points on their different paths where LAN and LAM meet and exchange passengers. Each ships cycle tales a full 10 standard periods ( 220 years). The meeting points are separated by 110 years, At the meeting points the ships have a party.

Less-is-More. (Quarry class GSV)
The Less-is-More is the sister ship of Likely-as-not

## No Conclusions (River class GSV)

NC has a reputation as a practical joker amongst the ships. It has few dealings with its passengers. The habitat section is dedicated to low density eco-homes. NC also has a large supply of terra-forming equipment including the largest concentration of nano-factories in EC.

Tightrope (River class GSV)
Tightrope was commissioned by the Tekkar as an independent free trading nation ship. It joined the EC when planetary trade ceased. Tightrope has a relatively small living space for a vessel of its class. It has large areas dedicated to industrial processing and construction. It also has a store of planetary-rescue systems including terra-form processors. Tightropes personality is sometimes described as 'uneventful'.

Contented (Super-Continent class GSV Modified)
Contented aka Big C was modified in 62664.17 to use a very long drive profile. This allows it to far extend its top speed at the cost of acceleration. By 62744.29 Contented will be reaching a point to exit the outer rim of the galaxy and begin the long-haul to the M29 Galaxy. Four modified super-lifters are positioned along its exit path to bring on-board the final personnel wanting to undertake the 5 Million year journey to M29.

Weapons platforms.

Weapons platforms in order of size (smallest to largest) are:
Unmanned Patrol Vehicle (UPV)
Small Armed Vehicle (SAV)
Planetary Defence Unit (PDU)
System Defence Boat (SDB)

Frigate
Cruiser

Super Cruiser (SC)
General Systems Vehicle - Tundra class (GSV)
Most Tundra class GSV's have now been fully decommissioned.
Ship names:
GSV - Tundra class:
Last Word ${ }^{(d)}$
Simple ${ }^{(\mathrm{d})}$
Best intentions ${ }^{(\mathrm{d})}$
Forget-me-not ${ }^{(\mathrm{d})}$
Past perfect ${ }^{(\mathrm{d})}$
Not impressed ${ }^{(\mathrm{d})}$
Out of sight
Swift decision ${ }^{(\mathrm{d})}$
Wonders why ${ }^{(d)}$
Meek ${ }^{(d)}$
Look forward ${ }^{(d)}$
Curvature ${ }^{(\mathrm{d})}$
Shame on you
Sweeping-statement ${ }^{(\mathrm{d})}$
Denial ${ }^{(\mathrm{d})}$

Poor Me
Absence of light ${ }^{(\mathrm{d})}$
Aspect ${ }^{(\mathrm{d})}$
Don't push me ${ }^{(\mathrm{d})}$
Three wishes ${ }^{(d)}$

Pass the salt
Full of promise ${ }^{(\mathrm{d})}$

SC:
Fear the dark ${ }^{(\mathrm{d})}$
Reaper ${ }^{(d)}$
Grim ${ }^{(d)}$
One of many ${ }^{(d)}$
Handsome ${ }^{(d)}$
Pulverise ${ }^{(\mathrm{d})}$
Behind you ${ }^{(d)}$
Claw ${ }^{(d)}$
Hard as nails ${ }^{(d)}$

Anvil

Judge and jury
Comes knocking ${ }^{(d)}$
Storm

Severance ${ }^{(\mathrm{d})}$

Twin Ships: I'm not Fat and You Fat Bastard

GSV It's the Only Way to Be Sure
Scout Ship: Dark in Here Isn't It?
Hospital Ship: Nil by Mouth

Go to Plan B

OU: All Out of bubblegum

Oops, Sorry

OU: Was That on three or After Three?
Do You Feel Lucky?

Wasn't Me, You Can't Prove a Thing

UPV So this is it, We're All Going to Die

SDB I Don't think you wanted to Do That

Please do not press this button again

Oh No, Not Again

Gravity Works

Put It Down, You Don't Know Where Its Been

Come Out, Come Out Where Ever You Are

OU No Pain, No Gain

OU No Such Thing as Overkill

OU No Such Thing As a Free Lunch

OU Situation Normal, All Fucked Up

OU Put That in Your Pipe and Smoke It

OU Or Are You Just Pleased to See Me?

OU Don't Blame me, I Just Work Here

OU Oh Look, I Squished It

OU Not On My Planet You Don't

SDB Not The Mamma

RV Game On

OU Tally Ho!

OU They Don't Like it Up 'Em

OU Don't Panic

SDB Incoming Fire Has Right Of Way

OU Appropriate Defensive Manoeuvre
Why Is It Always Me?
Its Not My Fault
OU But I Liked It the Way It Was
OU This Will Hurt You More Than it Hurts Me

OU Dive For Cover

How Does This Thing Work Again?

SDB Reality Sucks

SDB Bite Me

SDB Lets Just Face It, You're Crap
SDB Oh No, Reality's On the Blink Again
UPV Tactical Advance to the Rear
UPV Is There Anybody There?

SDB BOO!

UPV When I Nod My Head, Hit It

UPV We Need Bigger Guns!
UPV You Want Me To Do What?

UPV I Didn't Say It Would Be Easy
UPV I'll Get You If It's the Last Thing I Do
UPV Scrambled Egg
UPV What Do You Mean, You Haven't Done This Before?

OU Three, Simulated

SDB Incomming!

OU Right Between The Eyes

SDB I Can See You...
UPV Pink Rabbit
OU Cunning Plan

UPV What Do You Mean We're Lost?

SDB Who Was That Masked Man?

## Glossary of terms.

NND No normal defences apply
EB Energy blast
HA Hand attack
HKA Hand killing attack
RKA Ranged killing attack
DC's Damage classes
OIF Obvious inaccessible focus
IIF Inobvious inaccessible focus
IAF Inobvious accessible focus
OAF Obvious accessible focus
nn . Chance based on rolling nn or less on 3d6
$\{-\mathbf{n}\}$ Limitation on a power
$\{+\mathbf{n}\}$ Advantage on a power
KB Knockback
" Inches ( 2 m to game scale)
AP Active points
AVLD Attack applied vs limited defences
FD Flash defence
PD Power defence
KS Knowledge skill
AK Area knowledge
PS Professional skill
Tfam Transport familiarity
Wfam Weapon familiarity
Fam Familiarity. Equivalent of an 8- skill.
Segment 1 second of the 12 second turn
Phase A segment on which the character has an action.
Turn 12 Seconds followed by the post segment 12 recovery step.

## LS Life support

OCV Offensive combat value
DCV Defensive combat value
OECV Offensive ego combat value

DECV Defensive ego combat value
Hex A hexagonal 1" across used to map Hero System combats.
AG Anti-gravity
HTH Hand-to-Hand
IR Infrared
UV Ultraviolet
HE High explosive
AP Armour piercing
PFG Pre-fragmented 'Glazer' round
APDS Armour piercing discarding sabot
FMJ Full metal jacket
GL Grenade launcher
LAW Light antitank weapon
ETC Electro-thermal chemical (propulsion)
FOF Friend or foe
RF Rapid fire
AP Anti-personnel

