

ISSUE

17

October
2011

STAR FRONTIERSMAN

Magazine



DWD
STUDIOS

OUT OF THE BLACK

STAR FRONTIERSMAN

Magazine

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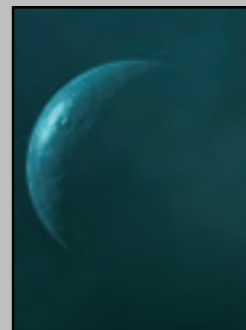
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On the cover: Landon 22 by *Ariel-X. Find out more
about this great artwork at <http://ariel-x.deviantart.com/>

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FOREWORD

I'm sure most of you are aware we are making each issue of the fanzine available in print format. I prefer staple bound at the gaming table, it lays flat, it's easy to write on, etc. With that said, we're trying to keep each issue around 86 pages. Browse to <http://dwdstudios.com/> and click on Downloads to order prints.

One of the biggest draws to Star Frontiers was the artwork. The race write-ups were very brief, however, I could imagine what a vrusk or dralasite would move and act like by "characters in action" images provided thought the product line. This fanzine has depicted a like feeling and I can't thank our artists enough. Drop them a line on the Star Frontiersman Guestbook <http://starfrontiersman.com/guestbook>

Upcoming in Issue 18 we'll learn about the *Real Truth about the sathar* from a TSR designer!

Next year is the 30th Anniversary of Star Frontiers. Several Frontiersmen have been meeting in Sector 6 hidden caches all over the Frontier planning several events. Rumors are their will be not one but two full adventure modules and a virtual con. I hope you are excited as I am.



Raise your dice hand high!
Larry Moore, Editor
submissions@starfrontiersman.com

(Artwork by Tom Stephens, [click for description](#))

ADVENTURE!

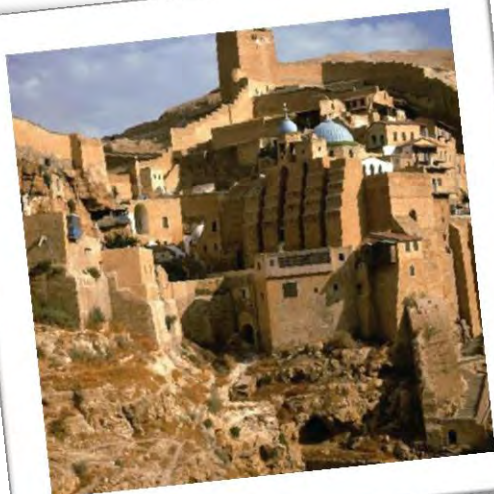
MONASTERY OF THE DIVINE FLAME

By Thomas Verreault/jedion357

THE ORDER

On Volturnus, in the heart of the Burning Lands, where free phosphorous can contact air and spontaneously ignite, an odd group has established a peculiar community, The Monastery of the Divine Flame. Populated by mostly osakar, this monastic community devotes themselves to meditation, austerity and physical labor, all in the pursuit of a deeper understanding of the mysteries of the universe.

The monastery was founded by an osakar mother abbot named Quee Llonn Eee. A former Capellan Free Merchant captain, she reportedly found religion, left the CFM and sold her ship to build the monastery. Claiming she could hear the music of the divine flame, she chose this location to assimilate the "symphony of the flame." Due to her mysterious disappearance while meditating out in the Burning Lands, the monastery is now overseen by another osakar mother abbot, named Ooolong Doramii.



Strangely, the monastery has been a magnet for the disgraced and the outcast. Because of this fact the monks take a new name upon induction into the beinghood symbolizing the leaving of the past behind and a new beginning. Monks of the Flame do not normally disclose their past identity, though they are often

forced to use it when they travel outside the monastic community.

The theology of the Order of the Flame is difficult to classify, it has elements of pantheism (god is in everything) but also seems to embrace a classic theism that personifies the Divine Flame as a personal deity. A core belief is that the Divine Flame resides within the "crucible" (think soul) of every sentient being. A hotly (pun not intended) debated theological topic is whether this flame resides within a mechanon. The robotic mechanons are clearly sentient and self-determining, though some experts disagree on this, but it may be impossible to ever know if they have a soul.

Monastic life is centered on hard physical work to maintain the monastery against environmental hazards as well as produce basic *plain* foods. The austere diet is thought to focus the mind to perceive the true nature of the flame. Three regular periods of meditation are organized throughout the day and some monks periodically practice an intense ritual of fasting and meditation out in the Burning Lands called the Refining.

The monks are noted for charity to the primitive natives on Volturnus and for rescue of injured and lost beings in the Burning Lands. Many a lost tourist has been located by them when all hope lost. They keep a few stabled lopers to assist with work and travel to a remote green house facility outside the burning lands.

The monastery itself is built into the side of a sheer volcanic outcrop. The building has been specially sealed against the hazards of the Burning Lands environment. Water in the monastery is pumped up from a deep aquifer but requires filtering to remove mineral taste and smell.

PLAYER CHARACTERS

Players considering this as a background for their character should consider assigning their highest or second highest ability score pair to STR/STA to reflect the hard conditioning of the monastic lifestyle. The character will have a new monastic name that reflects his embracing of a new destiny/future like Light, Harmony, Unity, and etc. but he will also have a past identity. It may be that the character has a troubled past, secret or is wanted for some reason. His purpose for leaving the monastery could stem from a vision during a Refining ritual and now he feels that his destiny leads elsewhere. There is the possibility that the monk has suffered a loss of faith or never even believed, simply using the monastery as a way to drop off the grid till the heat died down. A monk can have any PSA and skill set as all are welcomed to the order.

Due to their experience in the Burning Lands monks are immune to the phosphorus explosions (see below) as they can spot the conditions that will lead to one and avoid it. Characters traveling with a monk will also be immune to the effects of a phosphorus explosion. They also are immune to the check for damage by traveling through the rough terrain (see below). Also a monk has a chance to avoid encountering a quick death in the Burning Lands equal to 10% X the number of years he's resided there.

HAZARDS OF THE BURNING LANDS

Water Requirements

In the harsh Volturian Desert, a character needs 4 liters of water per day to survive. Players can reduce this amount 1 liter if they take 2 salt pills per day. They can further reduce this amount by 1 liter if they travel at night and rest in the shade during the day.

If characters move at their full movement rate they must double the amount of water to survive (after taking into account any precautions to reduce water consumption). Thus a character moving at maximum movement rate during the day without taking salt pills will require 8 liters of water a day to survive. If, however, the character were taking two salt pills a day and moving his maximum rate, he could survive on 6 liters of water. Finally, a character moving at maximum movement rate at night and taking 2 salt pills will require 4 liters of water a day to survive.

Dehydration

If the characters are operating at a deficit in water they will quickly become dehydrated. The effects of dehydration are* fatigue, headaches, body aches, and confusion. Dehydrated characters are -10% to all activity and this penalty is cumulative with any other penalty (i.e. wounds penalty). Dehydration is treated by re-hydrating.

Heat Exhaustion

If the characters continue to operate at the dehydrated level they can quickly become heat exhausted (STA check/ hour modified by the dehydration penalty or become heat exhausted). The effects of heat exhaustion are* generally pale clammy skin from heavy sweating, nausea and fatigue, dizziness and fainting, and finally headaches, muscle cramps and weakness. Heat exhausted characters have all ability scores halved and experience the -10% penalty for dehydration. Heat exhaustion is treated by reducing body temp and re-hydrating: usually resting in a cool place with feet raised, removing excess clothing, fanning, sipping water with a pinch of salt. Recovery should be rapid.

Heat Stroke

If the characters continue to operate at the heat exhausted level they can quickly become heat stroked (current STA check / hour modified by dehydration penalty or become heat stroked). The effects of heat stroke are* very hot skin, red skin, dry or damp skin (from sweat), rapid and quick pulse, confusion, irritability, unwillingness to accept treatment, and unconsciousness. The victim must be cooled immediately or could suffer death. The treatment for heat stroke is to move victim to a cool shady spot, cool any way possible, remove outer clothing, cover with wet towels, or place in a stream or tub of cool water (avoid chilling the victim), keep the victim lying with head and shoulders slightly raised, monitor closely for temperature rise or cessation of breathing and finally a medic will need to apply 1 dose of biocort and make a med skill roll. If the medic is successful the patient will recover but has loss 1/2 STA till recovered normally from rest and must rest at least a day or the heat stroke will return (as per the referee's judgment).

* The effects listed are typical for humans, a referee may need to modify them for the other races.

Phosphorous

Characters traveling in the Burning Lands will eventually encounter this phenomenon which gives the Burning Lands its name. When free phosphorous comes in contact with air it ignites. Every half day check for chance of a close encounter with an explosion (2 out of 10 chance, if no close explosion and the die result is even describe one as happening within 10d10m for flavor). For a close explosion randomly determine a party member and roll on a grenade bounce table to center the explosion d5 meters from the chosen party member. The explosion will be 6m diameter and all within the area of effect will take 2d10 STA hits plus stun (RS check for half damage and no stun). Any character outside 6m but within 10 meters will take 1d10 STA hits (RS check for half).

If characters are traveling in a vehicle and a close explosion happens dispense with the grenade bounce table and go directly to the vehicle damage table but treat the explosion as 4d10 dice of damage (essentially roll 2d10+4 and any result over 19 damages the vehicle- consult the table).

Terrain

The barren rocky ground is rough and jagged. Every half day of travel a character makes a DEX check or suffers 1d5 STA hits.

Predators

Quick deaths, surprisingly, are not an uncommon occurrence in the Burning Lands. Referee determines frequency. Caverns in the Burning Lands are frequented by burrower snakes and flitters.

ENCOUNTERS

Wanted for High Crimes or Misdemeanors

Star Law agents or other law enforcement are looking for a wanted being and think he may be hiding out at the monastery. Their mission will involve flying to a safe location just outside the Burning Lands and trekking to the monastery while braving the dangers of the landscape. At the monastery they will need to negotiate entrance (likely only Star Law has jurisdiction, with a warrant, to force entrance but bounty hunters will be turned away). There is the possibility that the agents will be invited in for the night and served a meal (simply because the wanted person is at the remote green house) and in the morning they will be sent away.

The wanted being could be a true believer or simply using the order as a crash pad till the heat passes. A plot twist could be that the agents get into trouble in the Burning Lands and the wanted being rescues them. True believer or not, this character could lead the players on a chase across Volturnus to the space port at Volkos.

Anker Dawn Down

A system liner (ship that shuttles between Anker and Volturnus) or star liner suffers a catastrophic failure and the passengers must bail. A number of lifepods come down in the burning lands. The players may have been on the ship (or not) and now they must rescue themselves and the others. Can they reach the monastery while quickdeaths prowl the burning wastes?

Deprogramming Daniel

A rich father is convinced that the Monastery of the Divine Flame is a dangerous cult which has brain washed his son. He wants him found and brought to Pale, Truane's Star for deprogramming.

One aspect of this mission is dealing with the hazards of the Burning Lands and capturing the son. The second will be traveling with a resistive captive. The third will involve getting paid as the father wants his son back and physcho-social skill could be important toward trying to "deprogram" him. The son is not really brain washed. Also kidnapping is still a crime despite the reason for it.

Optional Random Encounter Table

Roll Result

1	Wounded quickdeath, current STA 100
2	Large pile of loper skeletons
3	Campfire, burrow snake carcass litter the ground
4	Mirage, PC sees flora from home planet
5	Phosphorous ignition
6	UI-More on loper off in the distance
7	Crashed aircar, stripped of all parts
8	Thin ground, 30% chance of cave-in. PC's fall 10m into caverns below.
9	Sand storm irritates PC's, ½ movement
10	Unlucky tourist with camera, sungoggles, magnigoggles, toxy-rad gauge, vitasalt pills

NOTES

Monastery of the Divine Flame

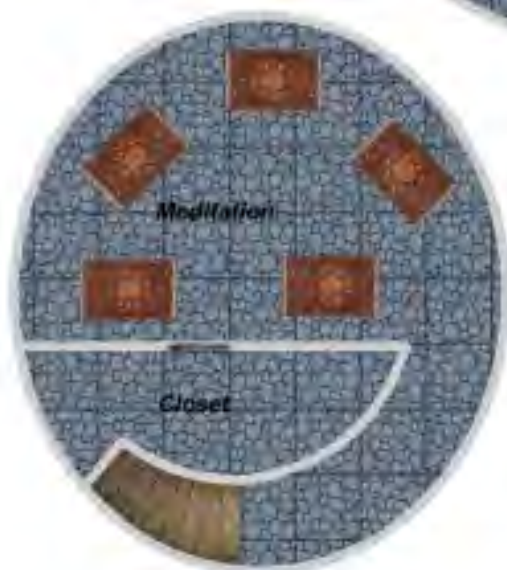


Monastery of the Divine Flame

Level 2



Level 3



BACKGROUND MATERIAL

Galactipedia*NET*

By Thomas Verreault/jedion357

Galactipedia*NET* is the premier electronic encyclopedia of the Frontier and Rim sectors. The brain child of Dollo Quu, it was developed in conjunction with Encyclopedia Galactica, Vrusk Atlas Corporation, University of Zebulon, University of Theseus, University of Osak, and Nesmith Enterprises of Triad (**NET**). After five years, the sector wide subspace networked electronic encyclopedia net was unveiled on Triad in the Cassidine system.

While electronic libraries and encyclopedias are nothing new to the Frontier and Rim, Galactipedia*NET* is the first to be fully networked by subspace relays. **NET** has set up and maintains sub space relays at one university in all heavy population systems and many moderate population systems. The local database on each planet connects to the planets local information net. Any new data added to one Galactipedia*NET* database is routinely updated to all Galactipedia*NET* databases via subspace making Galactipedia*NET* databases the most up to date and accurate databases available anywhere in civilized space.

The subspace relays usually connect via the standard jump routes between systems and data transmission can take as long as a week to filter from the Rim to Theseus System. In addition new data is reviewed and confirmed by **NET** staff on Triad to weed out inconsistencies, inaccuracies, and conflicting data. All data is transmitted along the subspace relay network to Triad before being publicly disseminated throughout the subspace relay network.

Access to the database is not free. **NET** is currently charging a 5 Cr day rate to access the database or a 75 Cr yearly (GST) membership. However, universities that host the database as well as their students and faculty have free access to the database. Universities hosting a Galactipedia*NET* database tend to have the highest level of computer program installed and store the most extensive information available. Private individuals, companies and institutions can purchase the software and hardware package for 4,000 Cr/ level. It performs as an Information Storage program but with sector wide access to information only limited by the program's level. The algorithms within the Galactipedia*NET* software condense data to fit the program level for lower level databases. Beings on any planet with a fully networked data net can access the main database through any electronic

device that connects to that net for the appropriate fee. The Galactipedia*NET* Database Program is marketed for installation on star liners and other ships. Ships carrying the Galactipedia*NET* database software can query the local data net for updates once they gain access to that network (docking with a station or initialing an update by com device). In order to operate a private Galactipedia*NET* database the owner must pay a yearly (GST) fee of 100 Cr for the updates or their database will fall out of date. Owning and operating a Galactipedia*NET* database and paying the update fee is not the same as having a yearly membership to the database on the local net which is a separate fee. The advantage of the yearly membership is that it usually provides access to level 6 data while a privately owned database only provides data according to its level.

NET certifies that the hardware and software of the Galactipedia*NET* database are safe and secure against normal security threats. Early testing revealed a back door to computers within the data base allowing hackers free reign in accessing that computer. According to Dollo Quu that and other security threats have be eliminated.

REFeree INFORMATION ON THE Galactipedia*NET* DATABASE

Treat the Galactipedia*NET* database as an electronic library or encyclopedia for the Star Frontiers setting. High population systems will have a level 6 data base while moderate population systems are likely to only sport level 5 or 4 databases. Light population systems if they have a database at all are not likely to sport anything higher then level 3. It would be unusual for a system with an outpost classification to have any database.

Players who gain access can pull public information on businesses, important persons, locations, maps, scientific knowledge, and anything else that would qualify as public information. It's a tool for the players to try to generate clues, helping them with an adventure. Secure information will not be available like details of a building's security system or UPF ship deployments. However, news articles detailing the arrival of the battleship Admiral Clinton at Morgaine's World or Eversafe Enterprises winning the security contract for Starplay's newest resort station would be. The important rule of thumb is that the Galactipedia*NET* database should provide clues to help players plot their actions. It should not solve problems

outright. Player characters will still need to act to complete a task, solve a problem or complete an adventure.

Information on animals or plants would generally be considered public knowledge unless it's been engineered and is proprietary knowledge of the engineering corporation. Level 1 knowledge on the animal would provide its name, and some of its statistics block. Level 2 would provide the full statistics block, a physical description, a picture (if available), and possibly one other detail on the animal. Level 3 would provide roughly half the information available on a creature. Level 6 data would provide the players with the full listing on the animal from the rule book or module unless there was a specific special ability that the referee deemed necessary to not share. Levels 4 and 5 would fall somewhere between level 3 and 6. Knowledge concerning an engineered creature that is classified as proprietary knowledge is considerably limited. Lower level databases might not even contain its name while higher level ones will likely have little more than a name, size, and physical description.

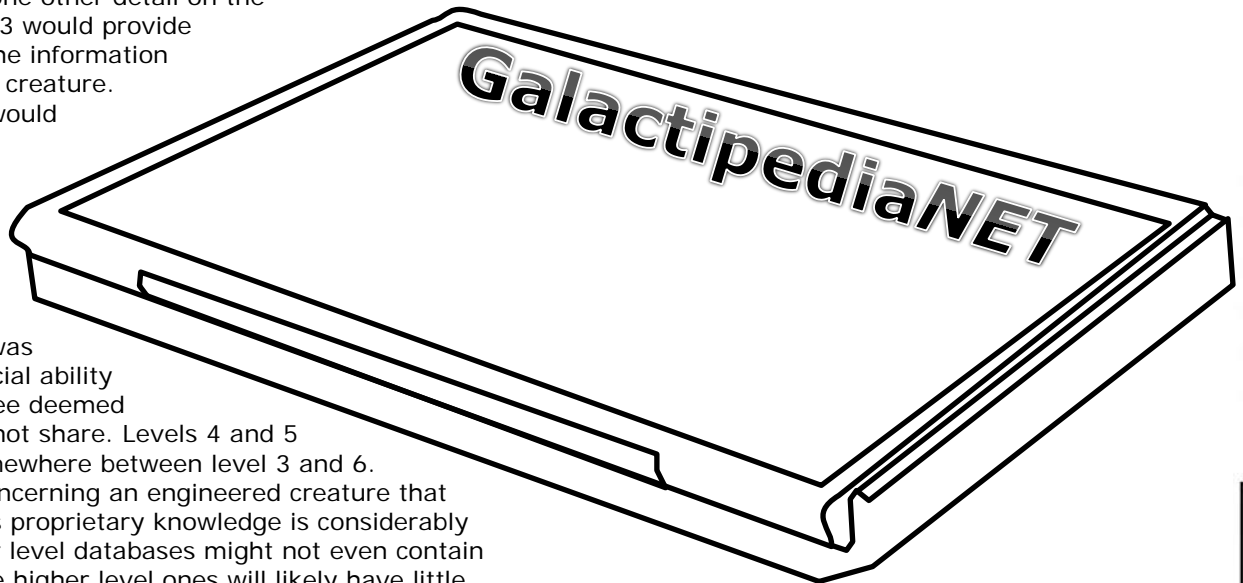
It might be possible to access a schematic or owner's manual on a lock or security device but the lock or device level available is limited to the level of the database accessed. In no way will a database provide complete information on how to foil the security system of a building or installation. The player characters may discover the type and level of a front door lock through simple observation and gain an advantage through the GalactipediaNET database on defeating it but other security measures will not be so easy.

Maps in the database are often limited by the compressions algorithms. A level one database usually stores abstract graphics as maps. Level 6 databases have detailed orbital maps as well as public record blueprints if they are available. A planet lacking a satellite network that was never mapped from space will lack good orbital maps despite the database level. Level 3 and 4 databases will have detailed atlases (if they exist).

Data on individuals in a level one database will only provide names and brief bios of planetary, corporate, entertainment, and sector level government officials. Level 3 data will include the above plus most prominent person of the planet the database is on as well as a slightly longer bio. Level 4 and above databases begin to include statistic blocks. Level 6 databases contain good information on most prominent persons on most planets in the network as well as level 1 data on minor or even insignificant persons on the planet where

it's located. At the very least there will be a name and a holo pic from public records (ID card).

In a civilized galactic community like the Frontier astrographic data is readily available. The raw numbers on any system are almost always available. Level 3 databases have brief system briefs and higher level databases have more.



ADVENTURE POSSIBILITIES

It is possible that **NET** mega-corp influences the information being disseminated. This could mean that details concerning rival corporate leaders has been shaded or omitted. Since **NET** reviews and confirms all GalactipediaNET data there is room for abuse of the system by this mega corporation. Referees can explore storylines where political processes (elections or impeachments) are being influenced by the data posted on GalactipediaNET.

NET may not have closed all of the back doors to computers hosting a GalactipediaNET database so that the corporation has complete access to all information in computers hosting the database. Hackers could also discover this backdoor or create one through modification of the update files in the software.

Bounty hunters could pay the query fee to the local database and gain a copy of a ships manifest for a star liner that has a GalactipediaNET database installed and is currently connected to the local data network. Infiltration teams might consult the database to obtain a list of properties owned by a company.

Summary: The GalactipediaNET database is double the cost of the Information Storage program however the function points remain the same by level. Its hard ware package includes the ability to gain updates through the local data network. It will require a Communication program to do so wirelessly.



ZEBULON'S GUIDE TO CADRES, CULTS & CRIMINAL ORGANIZATIONS

By Thomas Verreault/jedion357

The meg-corps are not the only "power brokers" in Frontier society. The three other power brokers are the various cadres, cults and criminal organizations that have gained substantial followings. They are by no means all public, and some are almost impossible to encounter, but they exist and pursue their agendas nonetheless.

Cadres are organizations of people who are usually all members of the same profession. There are cadres of teachers, miners, public transportation operators, and so forth. These cadres are constantly battling the mega-corps for more credits, more benefits, and more control over their occupations. Sometimes a cadre is honest, sometimes not, but lately many of them have been studying the renewed militancy with which the mega-corps pursue their goals. Some of the more powerful cadres, such as the Synthfood Workers or the Brotherhood of Spacers, may resort to their own brand of militancy to resolve differences in the future. Star Law is monitoring cadres carefully at the present time.

Cults spring up everywhere but usually fade within the year. Some are religious, some are social, and others comprise outright fanatics who like to express themselves in bizarre ways. Of the hundreds of known cults throughout the Frontier, a few have emerged over the last few decades that present a very real danger.

Criminal organizations come in every stripe and color, whether they are small street gangs, pirate bands, terrorist associations or organized dralasite Mafioso. Star Law maintains detailed records on all that it is aware of. Their modis operendi, beliefs and structure are varied and this category is a broad catch all category used by Star Law for groups that as a habit of general practice operate outside the law.

ZEBULON'S A-Z CATALOG

Alliance for the Rights of the People [ARP]

Classification: Cadre

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This cadre is a legal, liberal, political organization dedicated to upholding the rights of the citizens of the Frontier. While this appears to be a noble cause, the ARP has recently enacted a policy of political pressure to limit the authority of Star Law and other local law enforcement groups. This campaign includes holo-vid promotions portraying law enforcement agents as looming shadows that are always waiting for the average citizen to slip up.

The ARP also feels that the practice of maintaining penal colonies (currently located on asteroids) is cruel and that criminals should at least be kept planet side, within the influence of civilization. On the other hand ARP also has been the leading organization defending Rim immigrants who wish to live in UPF space against those cults and cadres that want them deported.

The ARP has its headquarters on Laco. It sometimes allies itself with the Frontier Peace Organization.

Anti Satharian League

Classification: Cadre

Intelligence Source: Zebulon's Guide to Frontier Space



Anti-Satharian
League

The Anti Satharian League is one of the youngest cults. It has only existed for a few years, but its numbers have swelled remarkably. It is an ultra-conservative group that constantly pushes the UPF for massive military build ups to face the "inevitable Sathar attack." They sometimes ally themselves with the Silver Death Cult in their attempts to root out sathar agents, but they suspect machines and people alike.

The league is an extremely public organization, but recently Star Law has received information suggesting that it has infiltrated many levels of government and is actually behind many covert operations that have been blamed on other cults. The league is led by J. Harrington Farnsworth, a human billi-creditaire.

Clan Renegade

Classification: Criminal organization

Intelligence Source: Star Frontiersman #16 "New Cults & Cadres" by Thomas Verreault/jedion357

Though the modern Clan Renegade claims descent from the historic yazirian fighting unit this claim is spurious. Star Law believes the modern Clan Renegade to be an ultra-secret but fully modern movement that plays on the conspiracy theories surrounding the demise of the historic military unit.

What is certain is that the modern Clan Renegade advocated violence against the Family of One but not the outright destruction of its religious beliefs. This is an important distinction since the membership is assumed to be all yazirian. The organization hates the Family One even while its membership still practices that religion. All of its members are believed to have sworn "blood enemy" against the clan controlling the Family of One.

The historic emblems of the classic fighting unit are all used by the modern Clan Renegade. Their catch phrase or slogan is, "Remember the Charge." This is a reference to the classic poem, "The Charge of Clan Renegade" but it also carries the double meaning of remembering the charge they have been given against the Family of One.

Clear Thinkers

Classification: cult

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This is a reactionary political group with militant leanings that seek to banish (or destroy) mentalists and enlightened characters in the Frontier. They have strong financial backing and fund projects that will develop items, drugs, and robots designed to thwart mental disciplines or seek out discipline users. This group is extremely politically savvy and has been careful to stay inside the law with its public activities, and is starting to run Clear Thinker candidates for various political positions, including seats on the Council of Worlds. The leader of the Clear Thinkers is a smooth yazirian politician named Hased Kor. He is one of the most powerful individuals on Yast, Athor and expects to be President of the Council one day.

Defenders of the Divine Will

Classification: cult

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This cult is a unique conglomerate of various religious groups that believe that the divine will of their individual deities formed and evolved planets perfectly. They are vehemently opposed to GODCo's terra-forming practices and some members have even threatened violence if it does not cease. Currently, they are considered a legal organization. Mega-corps are worried that the DDW's views may spread to eventually encompass any business that alters the original form of nature (including mining, forestry, and other operations that altar a planet's appearance and possibly cosmetics, plastic surgery, and other products or services that altar an individual's appearance).

Firsters

Classification: criminal organization

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This group is a quasi political/terrorist faction that believes all of the Rim races should be sent back to the Rim. Their slogans are such clichés as "The Frontier for

the Founders" and "Kick a Rimmer Today." At first this organization was not taken seriously by most inhabitants of the Frontier and became the butt of many a joke, but recent militant activities aimed at members of the Rim races and their businesses have sobered the public to the reality of violent racial prejudice. The Alliance for the Rights of the People is the greatest opponent of the Firster movement.

No Firster headquarters is known to exist, as its operations are completely covert. While none of the leaders are known, a rallying figure is known to be a dead vrusk named G'rch B'on. B'on was a member of the Firsters when they were still a tiny cult. He attacked an ifshnit couple one night, but died in the assault. The coroner's findings indicated B'on tripped over his own feet and broke his neck in the fall. The Firsters insist that witnesses (other Firsters, incidentally) saw the ifshnit pick a fight, killing B'on. B'on is now a martyr for the Firster cause and a rallying symbol for anyone who dislikes beings from the Rim.

Free Frontiersman Foundation

Classification: cult/ criminal organization

Intelligence Source: Zebulon's Guide to Frontier Space

The Free Frontiersman Foundation (FFF) once was a legitimate political faction within the United Planetary Federation. Over the years it lost members and political pull, and eventually a right wing group took control of it. While it is still public, many FFF agents and operations are covert and terrorist oriented. The purpose is to overthrow the UPF and supplant it with a fascist, galaxy spanning government. The FFF will stop at nothing to achieve its goals.

Free Thinkers

Classification: cult

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This is a new cult that has grown in response to the Clear Thinkers movement. This nonprofit organization is made up of various races and individuals, both psionically gifted and the non-gifted. The organization fights its battle in a legal, honest, and public manner. It funds promotional campaigns aimed at educating the masses about the benefits of having psionically gifted individuals in society. It has established legal aid clinics, educational grants, help lines, and other programs to aid both mentalists and enlightened characters. It works with the authorities whenever possible to aid in the location of psionically gifted individuals who can help solve crimes. The Free Thinkers have recently begun to open small offices in every major city, but their headquarters is on Morgaine's World, Prenglar.

Frontier Peace Organization

Classification: cadre

Intelligence Source: Zebulon's Guide to Frontier Space

The Frontier Peace Organization (FPO) believes that too many credits are being spent on Star Law, Landfleet, and Spacefleet. Lately, they have even suggested that one of the reasons for the sathar attacks is the sathar fear of a UPF and Rim military threat to their existence. The FPO promotes isolationism for the UPF and extreme cutbacks in military units on all planets and in the UPF in general. This organization is an arch-enemy of the Anti-Satharian League.

Guards of Clarion

Classification: criminal organization

Intelligence Source: Star Frontiersman #16 "Data Searches in the White Light System" by Tom Verreault/jedion357

The Guards of Clarion are a radical, violent arm of the Liberation Front seeking the violent overthrow of the Clarion monarchy. It is known for its virulent hatred of the Royal Guards, Royal Marines, and the Royal Mounted Constabulary. Their favored tactics are bombings and assassinations by armed groups. They famously bombed the Raptor's Roost, a popular Royal Marine nightclub. They have a published manifesto:

Declaration of the Rights of the Citizens of Clarion

We the Guards of Clarion do affirm and assert the natural and imprescriptible rights of the citizen to liberty, property, security, and resistance to oppression. We hereby call for the destruction of aristocratic privileges and the proclaiming of an end to exemptions from taxation. We assert freedom and equal rights for all citizens and access to public office for all citizens based on talent. The monarchy is to be dismantled, and all citizens are to have the right to take part in the legislative process. All citizens, being equal in the eyes of the law, are equally admissible to all public dignities, places and employments according to their capacities and without distinction other than that of their virtues and of their talents and we declare the elimination of the special rights of the nobility.

Hatzck Naar Pirate Band

Classification: criminal organization

Intelligence Source: Star Frontiersman #16 Frontier Timeline, by Thomas Verreault/jedion357

The infamous vrusk pirate, Hatzck Naar, began life as the Hatzck of House Naar. After becoming CEO of House Naar, he conceived a plan to turn House Naar into one of the new breed of vrusk conglomerate companies. Liquidating company assets in the Fromeltar system he made an all-out gamble on the newly discovered star system of Madderly's Star. The newly organized Naar conglomerate upstage the long planned human colonization mission by half a year.

From the beginning there was tension between the vrusk and the human colonizers that went further than racial differences. The underlying philosophies of farming methods added to the tension and the feelings of marginalization felt by the human colonist. The Naar conglomerate came to quickly dominate all aspects of

the colony's society and its corporate approach to farming quickly made the human colonist irrelevant with their sustainable/ soft impact philosophy. The Free World Rebellion by the human colonizers was quickly co-opted by radicals and led to massacres of the vrusk company personnel. The Naar Conglomerate never recovered. Hatzck with the few remaining company ships and a handful of loyal followers limped back toward Fromeltar. In the Dramune system he occupied the old vrusk observation and mining outpost on Outer Reach and embarked on a career of piracy.

His bitterness against the vrusk business establishment and humanity as a whole made him an exceptionally vicious pirate. His depredations forced the civilized planets of the Frontier to form the First Common Muster. When news of the muster reached him on Outer Reach he embarked on a grand raid determined to destroy all space based industry beginning with the human colonies. The Muster eventually caught and defeated his fleet in Timeon System. Hatzck was boiled alive in his space suit after being ejected from an air lock on a trajectory toward the star.

It has long been rumored that the Red Devil Pirate was one of his lieutenants.

HUSP

Classification: criminal terrorist organization

Intelligence Source: Dragon #98 "The Voltarnus Connection," Stephen Bonario

HUSP is a slang term for the Human Supremacists native to New Pale. The group practices a philosophy called human superiority. The members of HUSP preferred the isolation of New Pale and did not want it "contaminated" by the other races. Pale used its military to bully the weaker government into allowing other races to settle there. Pale saw this as a way to increase food production on New Pale and perhaps drive food costs down. Several months later, the HUSPs banded together and began terrorizing the new colonists, also attacking Pale's "colonial protection" forces.

The government of New Pale has virtually become a puppet but there is a dissident underground government that claims to be the only legitimate government of New Pale. Members of HUSP and other groups form this congress but it serves as little more than a mouth piece for spouting hate and racially colored speech.

Investors

Classification: cadre

Intelligence Source: Zebulon's Guide to Frontier Space

The Investors is an ultra-covert organization of a few billi-creditaires who wish to be the behind the scenes controllers of the United Planetary Federation. While the UPF is presently an organization that compromises all of the Frontier's planetary system governments, the Investors believe it could develop the UPF into a body that would override all local governments. While its

aims and methods are similar to that of the Free Frontiersman Foundation, the Investors is a much smarter and more hidden group. The Investors tries to gain control by financial wars, not by actual military ventures, as the FFF would.

Kraatar Liberation Corps

Classification: criminal organization

Intelligence Source: Zebulon's Guide to Frontier Space

The KLC is a secret militant organization that originally started on Kraatar in an effort to end vrusk domination of that once predominately human planet. Over the last few years it has evolved into a Frontier wide terrorist organization dedicated to freeing humans from the "cultural pollution" of the existence of other races. The KLC believes that once humans have taken control of all planetary and system wide governments, the United Planetary Federation, and all mega-corps, then the Frontier is assured of peace. The KLC is a prime target for Star Law investigations.

Liberation Front

Classification: cadre

Intelligence Source: Star Frontiersman #16 "Data Searches on the White Light System" by Thomas Verreault/jedion357

The Liberation Front was the action arm of the Liberation Party (now defunct) on Clarion, White Light system and is responsible for assassinations and terrorist acts. It continues to be active on Clarion but since the loss of its political mouthpiece it has been in decline. A direct result of this decline is that splintering off of the most radical elements to for the Guards of Clarion.

Liberation Party

Classification: cadre

Intelligence Source: Star Frontiersman #16 "Data Searches on the White Light System" by Thomas Verreault/jedion357

The Liberation Party had as its major platform plank the abolition of the monarchy and for decades had been part of the opposition parties on Clarion. In the aftermath of the assassination of King Leotus XIX it was discovered that the Liberation Party was little more than the political arm and mouth piece for the terrorist group responsible, the Liberation Front. A backlash of public sentiment ended the Liberation Party's functionality as a viable political party. Many of this party's members, who managed to avoid indictments, joined the Liberal Party to continue their opposition of the Crown.

Liberators

Classification: criminal organization

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This is a terrorist organization that is dedicated to "liberating the oppressed masses from the chains of mega corporation tyranny." This is an extremely

violent, illegal, quasi-political, economic cult that has already taken credit for hundreds of deaths due to bombings and terrorists raids, usually on mega corporation headquarters. Star Law suspects the Liberators are backed by a few rich individuals or another cult, but they have no leads yet on whom or what finances them. Though the identity of the leader of the Liberators is also unknown, certain terrorist members have been identified and their faces and descriptions are broadcast regularly throughout the Frontier.

MINER

Classification: front/ criminal organization

Intelligence Source: Dragon #98 "The Voltturnus Connection," Stephen Bonario

MINER stood for Mining for Industrial use of Natural Earth Resources. It was a front company that was run by the leader of the Red Devil pirates. The company originally bid for and won the contract to develop the Zebulon system but was later liquidated and its assets transferred to secret numbered accounts after the CEO faked his own kidnapping and murder.

Madderlian Church of Humanity

Classification: cult

Intelligence Source: Star Frontiersman #15 "Opiate of the Osakar" by Thomas Verreault/jedion357

This religious movement originated 17 years ago at Madderly's Star and is considered a dangerous cult by Star Law. However, its leaders have astutely used the legal systems of several planets to gain the status of a recognized religion. Star Law keeps close tabs on the church's activities.

Founded by Schmidt McCormick, a onetime follower of Jack Lagrange, McCormick espouses hate against all non-humans. The church believes that god is a human and that humanity will inherit the galaxy. The church teaches an Apocalypse is coming where god will cleanse the galaxy of the Daemoniac's evil alien vermin. Once this happens, all the enlightened humans will be given a star system to re-create in their in their own image. Unenlightened humans who never heard the church's message will be relegated to living in these star systems and given a chance to come to enlightenment. Ultimately, god intends for every star system to be the home of a deified human governing enlightened humans. Then he will open gates to other galaxies and thus humanity will inherit the universe.

In the Apocalypse the Daemoniac and his alien vermin will be cast into the Abyss, the huge black hole at the center of the galaxy. Any human that has heard the church's message and rejected it will also be cast into the Abyss to endure eternal torment. The church also teaches that it was never god's plan that aliens should inhabit the galaxy. At the Fall of Man, the first man, Adama, was tricked by the Deamoniac into opening a gate to another galaxy and allowing in the spirits of aliens to infest this galaxy. Once in this galaxy these spirits began recreating star systems in their image. For this reason god has prepared the Abyss for Adama,

the Daemoniac and his aliens.

These beliefs of the church produce to particular results among the rank and file believers. One is that they become abusive of those who hear and reject their message, usually telling them, "You'll get what you've got coming!" Secondly, there has been a marked rise in rank and file believers sabotaging archaeological digs or destroying ruins connected to the Tetrarchs or any other ancient alien civilization. The church disavows these actions with one voice then rails against archaeological research from the pulpit with another. Star Law is convince that the attacks are linked to the belief that aliens infested this galaxy through gate technology and the attacks have been ordered from the top down as an institutional policy of the church. Unfortunately, Star Law can't prove yet that McCormick has ordered the attacks.

A significant incident in the church's history was the Issaka Incident. An osakar named Issaka, a Capellan Free Merchant, indicated an interest of joining the Church of Humanity but later her body turned up murdered. McCormick and the church denied ever having contact with the osakar but Star Law maintains an open investigation in the matter. The CFM and osakar everywhere are outraged over the incident and there is concern that violence could erupt.

Malthar

Classification: criminal organization

Intelligence Source: SFKH1: Dramune Run

The Malthar is an individual as well as an organization. Malthar, the individual, is an extremely obese dralasite crime lord who own Dark World Station over Outer Reach. "The Malthar," the organization, is the direct expression of the individual's power and reach. It is an organization involved in piracy, smuggling, murder, drug manufacture and distribution. Malthar has variously referred to his organization by the name "the Syndicate" and by his own name.

Red Devil Pirates

Classification: criminal organization

Intelligence Source: SF-0: Crash on Volturnus, SF-1: Volturnus, Planet of Mystery, Dragon #98 "The Volturnus Connection," Stephen Bonario

While it has long been rumored that the Red Devil was a lieutenant of the infamous Hatzck Naar, what is known for certain is that the Red Devil ran the Mining for Industrial use of Natural Earth Resources (MINER) as a front company before faking his death. As the Red Devil pirate he operated clandestinely out of the Zebulon system raping the mineral wealth of Volturnus with slave labor.

His actions lead directly to the activating of the sathar obelisk, drawing the sathar back to Volturnus in the first major sathar incursion into the Frontier following the First Sathar War. He pirate band was all but destroyed on Volturnus and though his body was never recovered he is presumed dead.

Silver Death Cult

Classification: criminal organization

Intelligence Source: Zebulon's Guide to Frontier Space

The Silver Death Cult is an underground terrorist organization that exists to eradicate all intelligent artificial life forms from the Frontier. The organization actually started when the mechanons began their famous exodus from Zebulon and settled on Mechon. Over the years, the SDC has gathered more militants into its ranks. Its pose is that of a patriotic organization that wishes to keep the sathar out of the Frontier by preventing their mechanical agents from infiltrating society.

Supporters of Mechano

Classification: cadre

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

This is a growing political organization that includes members of all the Frontier races. The mechanites, as they are called, believe the mechanons are a sentient race (though of artificial origin) that deserves full citizenship in the United Planetary Federation. Though the mechanites began as a completely peaceful organization, their many encounters with the Silver Death Cult and the Anti-Satharian League have resulted in the death of many mechanites and the formation of their own security forces. It is rumored that some extremists within the organization are forming a radical splinter group that believes the ends justifies violent means.

Since one of the charges constantly being leveled against the mechanons is their cooperation with the sathar in subversive activities. Many mechanite investigations are aimed at discovering the truth behind these terrorist activities, with an eye to clearing the mechanon name.

The mechanites have centers on every civilized planet. Their leader, a human named Mathias Pricard, is extremely charismatic (PER/LDR: 99/99) and the driving force behind the cult.

Universal Family Movement

Classification: cadre

Intelligence Source: Star Frontiersman #16 "New Cadre's and Cults" by Thomas Verreault/ jedion357

The Universal Family Movement, while generally considered a cadre is vigorously denounced by the Family of One as a cult. It began as a dissident movement objecting to the despotic control of the Family of One. Under the leadership of theologians like Stig Slayerian, it adopted a philosophy embracing a pantheistic view of the universe and welcomes all beings into its fold.

The core tenet of the UFM is that the divine oneness of the universe is all and in all, therefore all being are welcomed. The Family of One has slandered this movement alleging that they would even embrace the

sathar. In practice the UFM seeks to promote ethical lifestyles, peace and positive action in its adherents.

The movement is small and dominated by yazirians. It forms small flocks in major cities overseen by a shepherd. Some flocks, usually dominated by a strong personality, take on a strong anti-Family of One stance, though most concern themselves with practical life issues of the membership. The Family of One has reacted strongly to the UFM, calling for arrest and even execution of key leaders. It's unknown if anyone has been detained or executed as a member or leader of the UFM in systems where the Family of One exerts influence, however, flocks outside of yazirian space have begun to institute basic security measures.

The symbol of the Universal Family Movement is a metal ring worn on a chain around the neck. The ring is banded in four colors, green, gray, white and yellow which are said to represent the core four races of the Frontier.

Zenk

Classification: criminal organization

Intelligence Source: Dragon #109 "Patriots, Terrorists, and Spies" by Kim Eastland

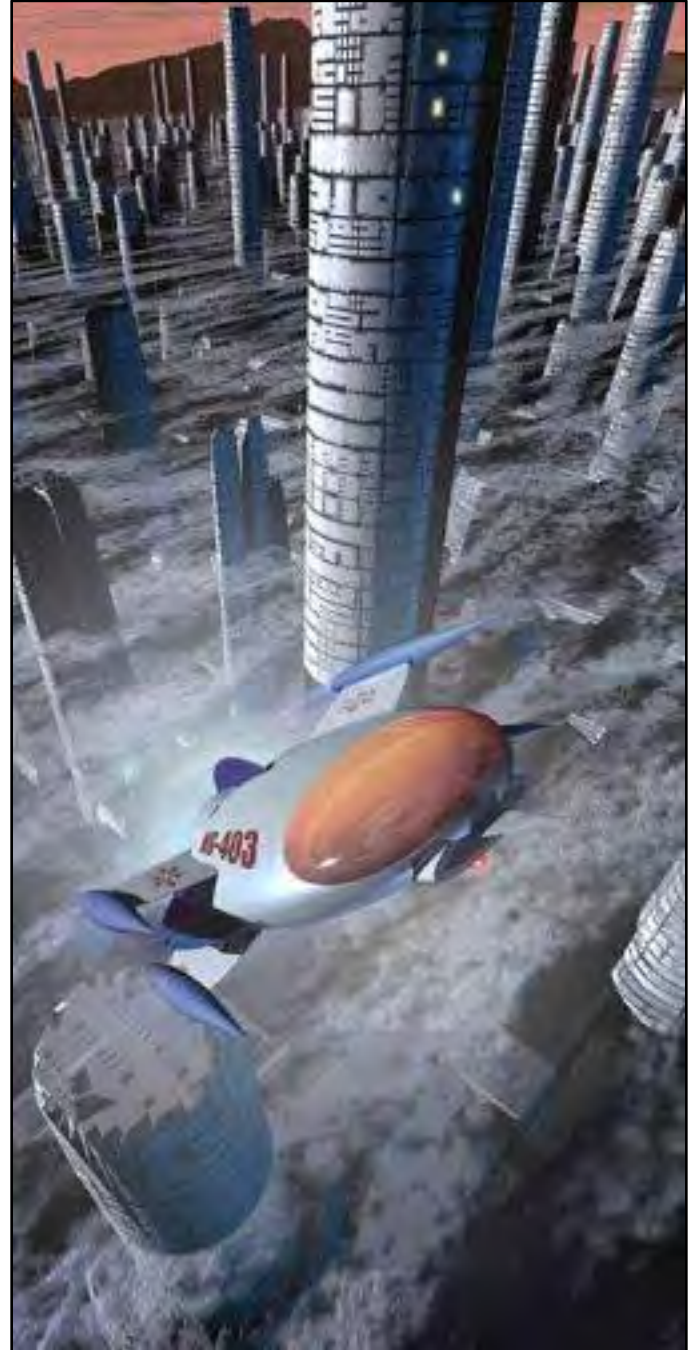
The Zenk (Vrusk for "family") is a Frontier wide criminal organization that currently is responsible for most high credit criminal activities on the Frontier. The Zenk sells its services to anyone, but it nearly always operates in its own best interests. There is no criminal activity that the Zenk cannot perform, though it prefers to stay away from anything directly relating to Star Law, Spacefleet, or Landfleet. No one knows who governs the organization, but referees should create NPCs who run local operations, as player characters may want (or be forced) to tangle with them at some time.

The Zenk is divided into eight different sections:

1. **Acquisitions:** robbery, forgery, embezzlement.
2. **Administration:** executives, crime planning, accounting.
3. **Eliminations:** murder, arson, body disposals, etc.
4. **Enforcement:** strong arm activities that do not usually involve killing, security, etc.
5. **Information:** blackmail, bugging, spying, computer crimes, etc.
6. **Leisure activities:** providing illegal intoxicants, entertainment, etc.
7. **Research and Development:** creation of new items or methods that help the other sections, maintaining the Zenk's equipment, etc.
8. **Support Services:** activities that support the other sections but that are not included in the definitions of those sections, such as fencing stolen goods, buying off the authorities, etc.

An interesting note on the Information section is that it supposedly has personnel working within most law-enforcement agencies. On the other hand, most law enforcement agencies, especially Star Law, have personnel working within the Zenk. Consequently,

information obtained by both sides is sometimes planted or altered in efforts to flush out spies on either side.



"Early Morning Liftoff" by Kort Kramer; Kort's inspiring artwork appeared in the very first issues of this webzine. See more creations at <http://www.kramerkreations.com/>

CREATING AN "OCTOPUS" OR SPY/TERRORIST NETWORK

By Thomas Verreault/jedion357

Editor's Note: The inspiration for this article came from Top Secret published by TSR Inc.

Octopus networks are made up of NPC's fulfilling roles. The roles are mastermind, administrators, agents and cut outs.

- » **Masterminds** are the brain of the octopus network, conceiving the plot and initiating it. Without the mastermind the network will stagnate or unravel. He is the key to the whole network. If the mastermind is taken out, the network will crumble into chaos.
- » **Administrators** work beneath the mastermind and above the actual field operatives. They are the managers who implement the plot. They maintain a legal cover and rarely commit illegal actions. They are often unidentifiable by the agents and operatives they manage.

Administrators have in-depth knowledge of their area but may not be aware of other administrators under the masterminds' control. Remember, it's the mastermind that moves the chess pieces within his network.

Twist: Truly brilliant mastermind may have several octopus networks which, at some point are connected through an administrator.

- » **Agents/Operatives** are the dirty work specialist. They are the ones that get things done and perform the illegal actions. They report to a single administrator, are extremely committed and will aggressively defend the administrator and their portion of the network. Agents have a number of cut outs at their disposal.
- » **Cut Outs** are used to do "leg work" and know very little of the network. All they usually know is that someone told them to do something. They're used in a network to protect the mastermind, administrators, and the agents from detection because they're more expendable; hence the name "cut out." Sometimes they are referred to as thugs, mooks and goons.

COMMUNICATIONS WITHIN THE OCTOPUS NETWORK

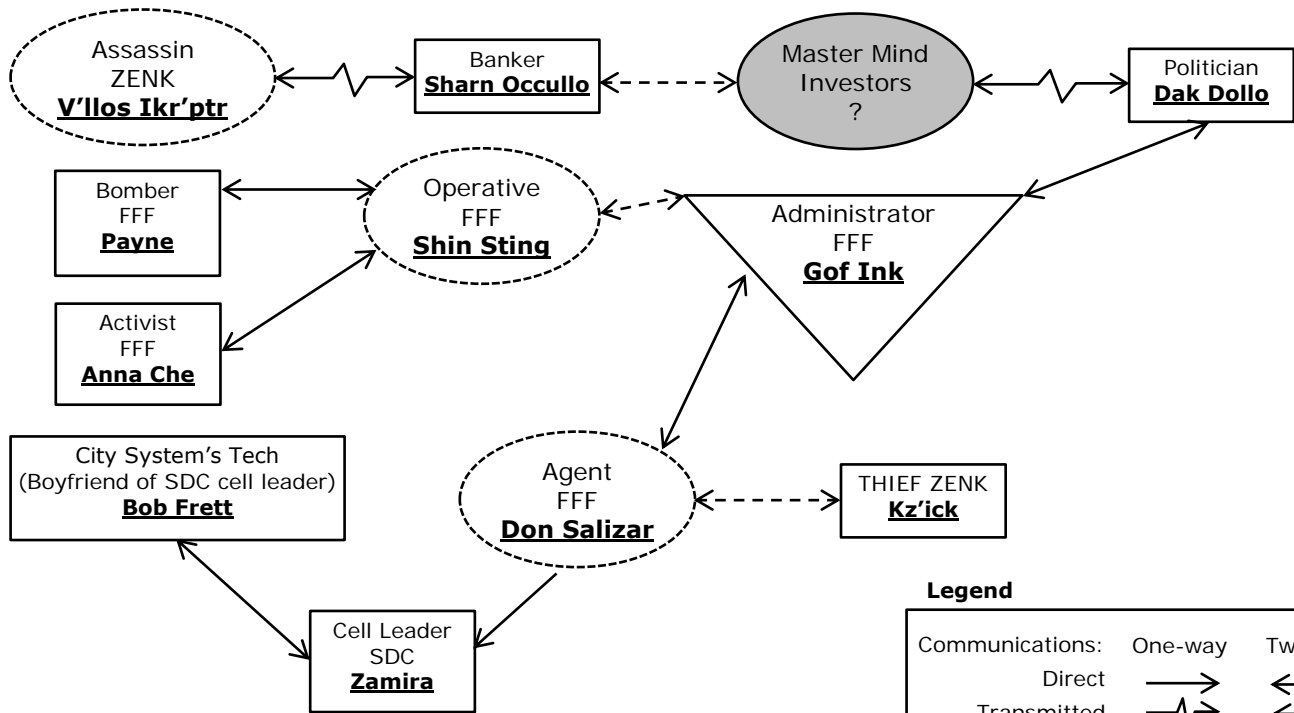
Communications between the members of a network are either one-way or two-way.

Two-way communications – either party can initiate contact.

One-way communication – only one member can contact the other in the network.

It's impossible to list all the methods of communication possible. Communications can be categorized into the following

- » **Indirect** – a message that everyone can see but is intended for a single person or group. For instance, billboard signs, TV ads, graffiti, etc.
- » **Direct** – message is it intended for a person or group that is communicated directly. For instance, ear-to-mouth, smell, touch, etc.
- » **Transmitted** – messages other than ear-to-mouth, they use public or private communications networks.
- » **Drop** – Message dropped in a public location for pick up either immediately (briefcase hand to hand) or later (P.O. Box, locker, etc.).



Create your own Octopus Network

Legend

Communications:	One-way	Two-way
Direct	→	↔
Transmitted	→ (with pulse)	↔ (with pulse)
Drop	- - - →	- - - ↔
SDC = Silver Death Cult		
FFF = Free Frontiersman Foundation		
<div>Master Mind</div> <div>Administrator</div> <div>Agent/Operative</div> <div>Cut Out</div>		

JERG'S DEFENSE QUARTERLY

UPF Upgrades Seeker Missile Deployment System

By Gary Cliff / Georgie / BD Cerridwen

Morgaine's World, Prenglar: Admiral Mista Royers has announced that the mine layer *Fencer* is to receive a newly designed Seeker Missile launcher. The upgraded version will mate an electromagnetic launch tube with a rotary magazine (often referred to as a 'silo') that can hold twice as many missiles as the old standard that has been in use since the First Sathar War. It is little more than a cargo hold and arm, similar to those found on common freight haulers. The updated version, called the Seeker Missile Deployment System Mark 2 (SMDS-2), differs in that it is mounted at the end of the ship on an extended spar projecting off the ship's core.

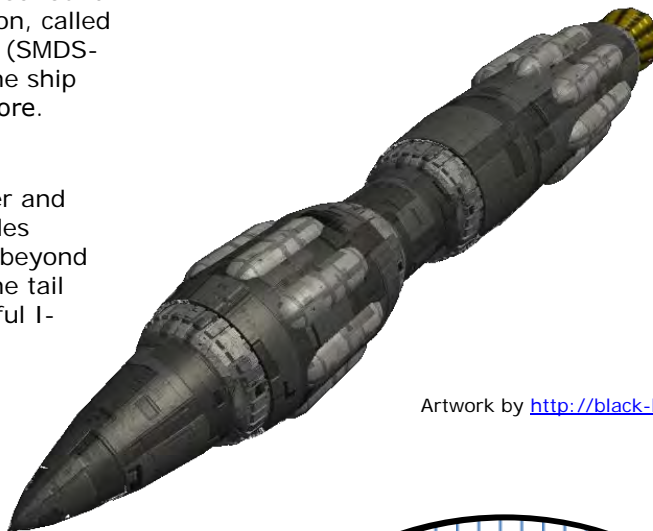
The silo is approximately 10 meters in diameter and about 14 meters long. The launch tube protrudes ventrally and extends an additional 14 meters beyond the base of the silo, reaching almost beyond the tail end of the nacelles containing the more powerful I-67 Ion Propulsion Drives (as detailed last Quarterly).

The new silo design includes an independent control station and backup power, allowing the vessel to deploy missiles even when main power or the ship's computer is offline. The launcher itself can fire 2m diameter, 12.75m long missiles from its launch tube at an impressive 10 gees and can reportedly be dialed in to exacting increments of 0.03 gees. This allows the launcher to negate much of its ship's own momentum and thus deploy a wider field much more quickly. "Higher deployment speeds of the mother ship will allow us to extend the range of our seeker fields," stated Admiral Royers. "Obviously this allows us to engage hostile fleets further from UPF homeworlds and resources."

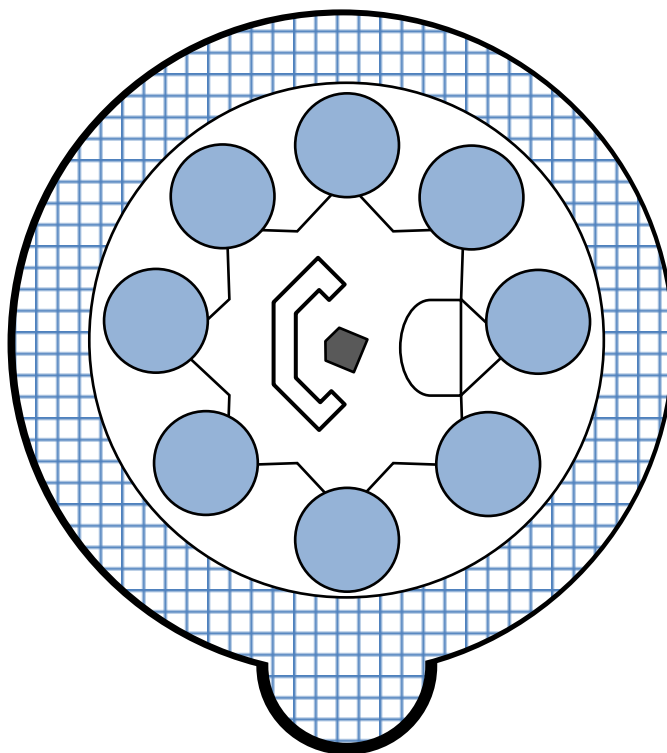
The new design is purported to have originated within the Q'zitz Trade House, a scrap metal giant in Vrusk controlled systems. Q'zitz representatives denied all knowledge of the SMDS-2, and any intentions to expand to become a rare, new Vrusk Conglomerate. Layers of secrecy are common when dealing with Vrusk corporations and our Dralasite correspondent was unable to detect any deception. Jerg's researchers have been unable to trace any new divisions or subsidiaries within the trade house. However, the rumors of the updated weapon system's origin within Star Fleet are too reliable to ignore. We expect to see new outside investment in Q'zitz Trade House from many of the defense minded companies and fund managers in the near future.

The *Fencer* is scheduled for space trials next month and is expected to take half a year to complete shake

down (times in Galactic Standard increments). Afterward it is expected to deploy independently of the major task forces and establish a patrol route to cover systems vital to UPF security.



Artwork by <http://black-knyght.deviantart.com>



DOC MCGEE

By William Douglass

Here is an NPC you can use to assist the PC's, add flavor to an adventure or as a new adversary.

Race: Human
Sex: Male
Handness: Left
STR/STA: 45/45
DEX/RS: 45/45
INT/LOG: 60/60
PER/LDR: 80/70

Consider Doc McGee having a Biosocial Skill set of level 4.

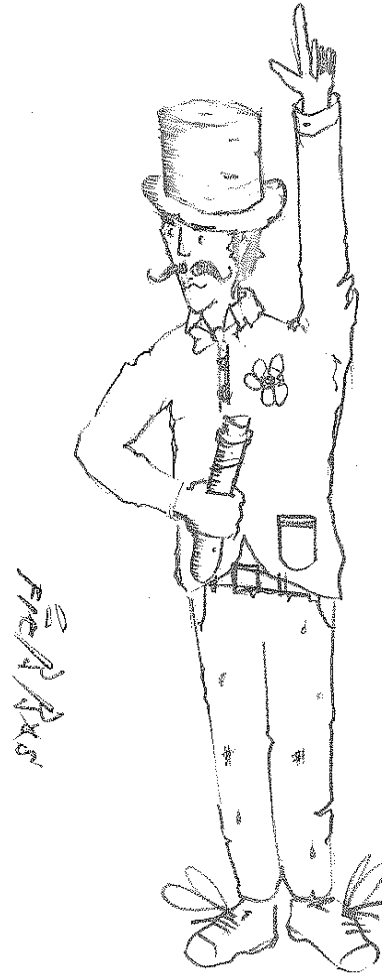
Angus McGee was born into a family of means. His Father was a doctor and his Mother was a scientist. Angus followed in their footsteps and did research medicine for the Pan Galactic Corporation. Sent to do research at a small colony where a new disease was killing the colonists, Angus discovered a cure. Once the PGC exec overseeing the colony had the cure, the colonists were charged for the medicine. Due to the colonies failing profits, many of the colonists could not afford the medicine. Angus tried to steal some and help them but it was too late for most of the colonists. Embittered and disillusioned, Angus left the employ of PGC.

He then found work as a medic for an independent salvage team. They would scour battle sites and follow rumors of lost ships looking for anything they could make a profit on. It was during one of these expeditions that they discovered the **Star Plantation**. It was an old abandoned Agro ship. Angus was inspired to see if he could get the ship functioning again and start his own business. At first, the salvage team did not see the potential but Angus was very good at persuasion. Once the engines were running and some of the hydroponics bays were operating, they were able to limp into a star port and get the ship properly repaired, somewhat. Angus used the last of his inheritance to make modest repairs, and load up some supplies. Thus he began to travel the Frontier selling food, medicine, and other home grown items from the ship to small communities and outposts. He now travels from planet to planet in the Frontier as a Free Trader, using the **Star Plantation**. For a fee, he transports items that need special handling, some legal, some illegal.

Only a small free trader, he marginally draws the attention of the corporations, sometimes having to defend himself. Angus has a good heart, but when it comes to corporations he only has disdain. Some say he is a shyster, others say a blessing. One thing for sure about Angus "Let the buyer beware".

Plot Ideas:

- » Legitimate business
 - Corporations want him stopped
 - Protection from Pirate attacks
 - Wealthy person looking for some exotic items
- » Illegal business
 - Star Law after him
 - Theft increases when his ship is in the system
 - Unsatisfied customers wanting revenge
 - Harmful products



Artwork by Mark Garlick



OPTIONAL RULES

ANDROIDS AS A NON PLAYER CHARACTER RACE

By Victor Gil de Rubio

ANDROID STATISTICS

Statistic	Description
Average size	1.9m tall
Average mass	80kg (male), 55kg (female)
Average life span	200 Years
Body temperature	37° C

PHYSICAL DESCRIPTION AND STRUCTURE

Androids are the crowning achievement in Cyber-Technologies Corporation's Robotics division and represent the first steps in creating artificial life. The few androids that were created followed the basic symmetry of the Humans that created them. They possess a duraplas articulation frame much like a robot's over which is anchored a fiber-mesh musculature that allows them to move much in the manner of a human. Fiber optic cables form a network of nerves over this allowing the android an approximation of touch and all of it is tied to a central processing matrix.

Androids, unlike robots make extensive use of nano-technology. They can convert organic material eaten into its core components which are then used by the nano-techs to repair damage, allowing an android to eat and heal. Androids are covered with syntheflesh and hair which passes for natural skin and hair without a chemical test. The first proto-types had pasty skin, but later versions created before production stopped were completely indistinguishable from organics, except that androids do not perspire and lack body odor.

Androids are powered by a micro-power generator that will last 200 years without needing to be replaced. The generator is only powerful enough to power the android and cannot be used to power external equipment or tools. Like a robot an android's neural processor must spend a minimum of 4 hours/ 24 hour period updating

itself, and deleting useless sensory data. This diagnostic mode is the closest an android comes to needing sleep, and as a side effect causes androids to dream.

SENSES

Android's senses are sharper than a human's senses, and they possess ultraviolet and infrared capabilities enabling them to see in the dark just as well as they can in daylight.

SPEECH

Android's vocal capabilities were allowed to match the capabilities of a human, but in truth an android's vocal range is slightly better than that of a human, allowing an android to communicate with races that a normal human have trouble communicating with.



Visit the stunning work of Yves J. Malgorn at <http://www.ym-graphix.com/>

ATTITUDES

The achievement of creating the first artificial life was not met with praise or accolades and because of pressure by the Vrusk and their allies in the UPF Cyber-Technologies Corporation was forced to abandon the project. There is rumored to have been only a few hundred prototype androids created, most which have been impounded by Star Law, but one of the transport ships headed to a Star Law security dump vanished and rumors persist that the androids on board took over the ship and that the androids have dispersed throughout the Rim systems.

Androids were not programmed with the same core programming that robots have and so their attitudes have developed along much more natural lines. Androids though have a deep rooted hatred for the vrusk who were instrumental in the move to outlaw their production.

In general, androids seem enigmatic and aloof. Many of the more devil may care races find them a little too analytical for their taste. Androids however have a strong desire to experience life, and many gravitate towards the Bio-Social, and Explorer professions.

SPECIAL ABILITIES

Though Androids are not living creatures in the conventional sense, their Stamina score represents the efficiency of their internal power generator. As an android performs strenuous activity the android's reserves lower which imitate a living being getting tired from overwork. Androids have immunity to toxins, paralysis, stunning, and disease. Androids cannot be repaired like robots can nor do they benefit from first aid or healing, but their self-healing properties allow them to recover from damage like any normal character. An Android that loses a limb can reattach it if they hold it in place for one hour allowing the nanotech's to reattach it on a cellular level. But more than this if an android loses a limb and cannot rejoin it the nanotech's will recreate that limb in two weeks for an arm, and one month for a leg. An android that has its head severed however is "killed". Because an android's neural processor is electronic, it is immune to mind-influencing effects.

An android is equally adept at using either hand so they suffer no off hand penalty. Lastly androids structurally are denser than a human which allows them to reduce damage from non-energy weapons by 1 point per die.



WEAPON LAWS OF THE FRONTIER

By Cedric Einarsson

"Excuse me, sir. May I see your sidearm, ID card, and weapons permit, please?"

"Of course, officer. I'm a PGC security agent, authorized to travel armed."

"I see. Sir, you'll have to come with me to the station. I must regretfully inform you that you are being charged with ten violations of municipal weapons ordinances."

"Ten? How is that possible? That's the only gun I've got and I showed you my permit!"

"Yes sir, but that's PGC-issued permit, not valid inside the city limits without a judge's vouchsafe, which you don't have. Ordinance requires energy weapons have fixed internal power supplies with no external hookups, not the powerclip-capable version you have, and certainly not connected to that backpack. You also have a military-grade accessory mount with an infrared scope, both separate offenses. You do not have the required gun-camera, electronic grip safety, SEU flow restrictor, or tracer chip. And you are carrying it in an exposed hip holster rather than a concealed-carry rig. Even overlooking the leg tie-downs and substandard safety catch, I'm afraid the fines will be quite extensive. Sorry."

"But... but I didn't know about any of that!"

"Ignorance is not a defense, sir. Please come along quietly."

There are ninety six inhabited planets and moons in Frontier and Rim space, each with its own ideas about how their residents should be protected, and those usually take the form of weapons regulations. But how is a Referee supposed to decide on distinctive and reasonable gun laws for each of them? Here are a few considerations that can make your worlds have a little more flavor while giving your players hair-pulling and wallet-draining fits.

GENERAL CONDITIONS

There are four things to consider about setting up weapons laws:

- » Environment
- » Population density
- » History of conflict
- » Settlement age.

ENVIRONMENT

The region where people live sets the "baseline" need for an armed population. A tropical forest teeming with life of all kinds will have vast numbers of predators and scavengers. Even the prey creatures are likely to have potent defenses. A harsh desert world will have few life forms, but they will likely be well armed with claws, stings and toxins as the line between predator and prey begins to blur. Temperate forests (the most favored areas for colonization efforts) will have fewer predator animals, but they will tend to be larger and more powerful. A water world may have abundant life and most of it may be mere curiosities, but well over a quarter of all aquatic life is carnivorous, half is omnivorous, and all are opportunistic.

Wilderness areas are likely to have mild or nearly non-existent weapon laws, and only slightly more strict ones in borderland settlements. Of course, some predators rarely need more than light weapons to counter them. For example, the Clarion Root Scorpion is deadly venomous and fiercely territorial, but it averages only fifteen centimeters in length, is ground-dwelling, and it's bright coloration is easy to see so fending it off rarely takes more than a whack with a long, stout stick. The same cannot be said the Volturian Cave Bear. Although rarely encountered and possessing only claws and teeth, the brute strength and great endurance of this creature often ends in death for the unfortunate traveler. Many have endured multiple strikes from large-bore and high-yield guns without even slowing down.

Space stations and domed cities often have draconian gun laws. One stray shot can expose large areas to vacuum and result in multiple deaths so restrictions are taken very seriously. This is one of the few areas that projectile weapons are more restricted than energy weapons since a majority of space-based settlements are lined with energy-absorbing materials that lasers and rafflurs cannot easily penetrate. Also, these settlements are often nuclear-powered so energy is cheap and readily available, making rechargeable weapons preferred over those that use expensive imported ammunition.

Although undersea settlements face threats similar to space settlements, many weapons simply do not work well underwater. Gyrojets and sonics are underwater workhorses which makes them prone to many minor ordinances, while other weapons tend to have few but stronger restrictions.

POPULATION DENSITY

Population density plays the greatest role in weapon laws. The more people live and work in a restricted area, the higher the crime rate will be. A town of ten thousand people living in a space of five square kilometers (2000 people per km²) will have a crime rate twice as high as a city of one million spread over a thousand square kilometers (1000 per km²).

Bear in mind that the majority of crimes in a high-density area will be petty crimes like burglary and

vehicle theft and there will be (proportionally) fewer violent crimes, but the chances of violence putting more people at risk is much higher just because there are more people that can get caught in the crossfire, so violent crimes will be greatly feared. Stress-related crimes will also be much more common. As a result, gun laws are likely to be much more restrictive.

In low-density areas there are fewer people living in close proximity giving fewer opportunities to commit crimes. Also, law enforcement must cover a much wider area to protect the same number of people, and most police will be arriving after a crime has happened rather than while it is in progress. As a result, a person must depend on himself for defense of life and property. Third, the chance of innocent bystanders being caught in the crossfire is much lower, making violent crime more of a personal affair rather than a threat to the whole community.

However, because people are more likely to be armed, the chances of violent crime are greater. Criminals are predators, preferring to hold a strong advantage over their prey. As such, a criminal is more likely to use violence (or threat of violence) combined with surprise to seize and keep that advantage. Even so, the number of violent crimes per capita is still much lower than in high-density areas.

HISTORY OF CONFLICT

Every world develops differently, but conflict is often a common ingredient. Worlds with a strong undercurrent of discontent or even organized rebellion, such as Kraatar, are far more likely to have harsh weapons laws. Even governments that were brought to power through popular revolt fear being replaced the same way and will limit gun availability. Corporations are particularly sensitive to the possibility of a "peasant uprising" and corporate worlds like Pan-Gal and New Streel enact very firm regulations. Worlds with a history of open warfare like Laco are likely to have a lightly armed population if only to prevent full-scale war from blossoming again.

On the other hand, worlds that have faced foreign invasion tend to have more relaxed regulations because the backbone of defense would be a well-armed population. This is especially true of worlds that have endured the brunt of Sathar attacks like Pale. Also, worlds that have a weak government or common violent tendencies will have equally weak gun laws. On Outer Reach, a world run by crime bosses and petty warlords, an unarmed resident will soon be a dead resident.

Keep in mind that places that are at risk from outside threats often have few laws dealing with longarms like rifles and carbines (suitable for emergency military service) but are more strict about pistols, while places at risk from crime and insurrection are more restrictive on longarms but often permit sidearms for personal defense.

SETTLEMENT AGE

As a settlement gets older, it changes culturally. Most natural hazards have been heavily suppressed or eradicated. The population (and crime rate) will have grown. More people equal more taxes, resulting in a larger and stronger military that reduces the danger of foreign invasion. The need for the rugged self-reliant pioneer has faded while the collective needs of the community have grown. Overall, life is safer and more comfortable, but it is also more group-oriented.

Immigrants at this stage are less likely to be the frontier colonist looking for a fresh start and more likely to be a business-type service-oriented professional looking for new markets and less competition. They are emigrating from other well-established worlds where safety is the job of the police and military, not the individual, and they will bring these concepts with them. As a result, the older a settlement gets, the more it's people are less worried about threats from outside society and more worried about threats from within, so weapons laws will get more restrictive over time.

But most insidious is the shift in perception. Laws will begin to be passed based on fear rather than need, and how a weapon looks will be more important than what it does. This will be moderated by those who understand the destructive power of modern weapons, but they will become the minority as bands of civic organizations begin pushing their own agendas. The results can be a mish-mash of confusing and often contradictory laws.

"In the city of New Claremont, a person may not be armed while in his home, vehicle, workplace, while traveling between those places, any place that provides alcohol or narcotics, or on property not under his direct authority. Everywhere else, he can be armed however he chooses."

FINAL NOTES

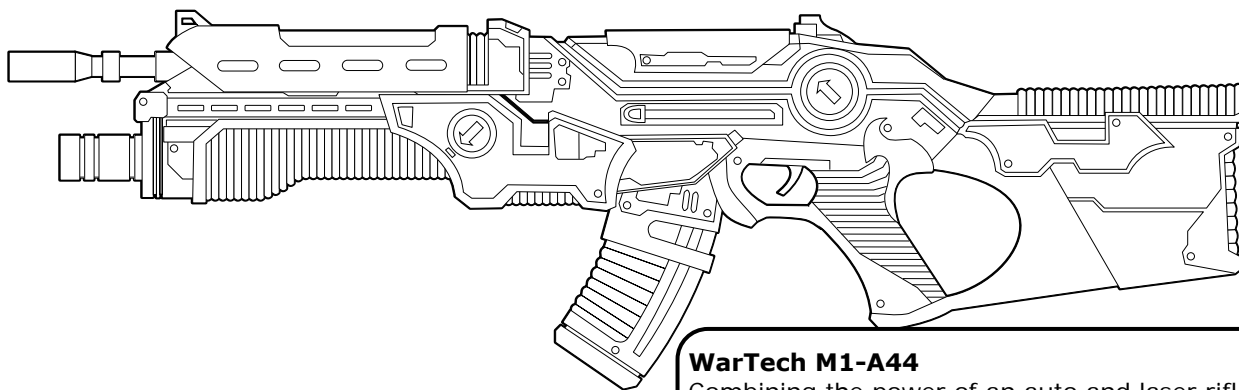
Ranged versus Melee

Despite what might be seen on vidshows, the number of melee weapons in common use is small. Handguns are more portable, more lethal, and take less training to use. But in places where ranged weapons are heavily restricted, the use of melee weapons has flourished. In places where ranged weapons have very few restrictions, melee weapons might be carried as an afterthought or as a multi-purpose tool. And in areas that are in the economic gutter where there's little money to buy and maintain guns, a flashy melee weapon used by a street thug with a few fancy moves is often enough to intimidate victims into submission. But woe betide the petty thug who runs afoul of someone competent armed with a broom handle or a trashcan lid and a length of chain.

Because melee weapons depend more on the user's skill than the weapon's power (as do martial arts), and so many weapons can be improvised from common materials, restrictions tend to be limited to registering highly skilled beings in local police databases (and that only rarely). Only in paranoid societies are melee weapons extensively restricted, and that tends to be based on the weapon's appearance and reputation than actual usefulness.

Those who are exempt

All over the Frontier and the Rim, the military is exempt from weapons regulations while on duty. Law Enforcement and corporate security services are also exempt within their jurisdictions. Certain professions may be authorized to use restricted weapons under certain circumstances, and explorers on newly discovered worlds often carry whatever they like. And as always, the more important and influential you are, the more you can get away with.



WarTech M1-A44

Combining the power of an auto and laser rifle this weapon is unmatched in the frontier.

Cost: 1,500 Cr

Statistics: As per auto/laser rifle

STARSHIP COMBAT CASUALTY SYSTEM

By Scott R. Mulder

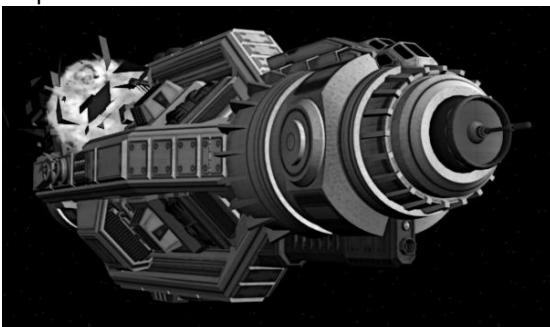
UNDERSTANDING CASUALTIES

Space travel is a dangerous endeavor and those who choose it as an occupation or way of life face these dangers on a daily basis. Whether from combat or accident, these dangers can often result in casualties for the crew of a spacecraft while performing their duties. The term casualty refers to anyone who is injured or killed in a disaster or during an act of war. In the scope of the Star Frontiers Knight Hawks Game this definition can be expanded to include any crew members who by injury or death are no longer able to perform their duties.

COLLATERAL DAMAGE

When a spacecraft's hull is impacted by a collision or weapons fire the kinetic energy of the impact is transferred throughout the interior of the ship in the form of longitudinal compression waves. These shock waves move throughout the structure and atmosphere inside the ship's hull causing damage to both machinery and crew members alike. This kind of collateral damage is one of the leading causes of crew member casualties on space faring vessels. A violent impact, such as a direct hit from an assault rocket, can reduce the interior of a ship's compartment to ruin in a matter of seconds and throw unrestrained crew members around like rag dolls. The more damage a spacecraft suffers the more hostile the interior environment will become. The force of the shock waves can be strong enough to bend, crush, and sheer even reinforced metal components and structures. Under these conditions normal everyday objects, tools, and equipment can become dangerous debris and deadly shrapnel. With each impact more of the ship will begin to break away causing increasing injury to the crew members who live and work inside. Internal damage can also rupture fuel lines, atmospheric gas stores, or power conduits which can result in the danger of fire. A fire inside the enclosed environment of a spacecraft is one of the most dangerous and feared conditions in space travel. A fire that is not contained quickly can consume a ship and its crew from the inside out. More than one space

craft captain has been faced with the awful choice of losing



their ship or venting and entire compartment into space in order to snuff a fire.

It is important to consider, that while impact shock waves can shake a ship to pieces, there are also silent killers in the vacuum of space. Some weapons which do cutting, burning, and irradiating damage don't necessarily cause shock waves from a kinetic impact. Weapons such as lasers can puncture a spacecraft's hull like a rusty can without so much as a noticeable nudge. Attacks like these can cause secondary kinetic damage as they cut through structural supports, fuel lines, and power conduits resulting in violent internal damage from explosions and decompression. These silent killers can be equally devastating for unsuspecting crew members as they carry out the day to day duties on their spacecraft.

CASUALTY SYSTEM COMPONENTS

The Casualty System is an optional set of game mechanics which are designed to simulate crew member casualties that are sustained when a spacecraft is damaged. This system is composed of four components which include the Casualty Determination Roll (CDR), the Minimum Crew Factor (MCF), the Loss of Control Roll (LCR), and the Crew Restoration Rate (CRR).



CASUALTY DETERMINATION ROLL

At the end of each phase where damage is assessed, players will perform a casualty dice roll for any spacecraft that has sustained damage. This dice roll determines how many crew members have been injured and are no longer able to perform their duties. The larger the spacecraft's hull size the larger the number of crew that are serving aboard who have the chance of becoming casualties. For this reason the number of CDR dice is determined by how large the ship's hull size is. Players can determine how many casualty dice to roll during the CDR with the table listed below. For example, the UPF Destroyer Intrepid is hit by a rocket salvo from the Sathar Destroyer SAV Stinger and sustains 15 points of damage. Since the UPFS Intrepid has received damage during the attack the player rolls 1d10 to determine how many crew

members were injured or killed in the attack. The player rolls a 2 for his casualty determination roll and notes on his ship record sheet that 2 of his 25 crew members on his ship are now casualties. If the CDR roll exceeds a spacecraft's crew compliment it is assumed that all crew members were wounded when the ship was damaged and are now casualties.

CDR Dice Table

Hull Size	CDR Dice
01-05	1d10 - HS
06-10	1d10
11-15	2d10
16-20	3d10

* HS = hull size

MINIMUM CREW FACTOR

The Crew Factor (MCF) is the absolute minimum number of crew members required to operate and maintain control of a spacecraft. The Minimum Crew Factor score for any spacecraft is equal to its Hull Size (HS). For example, a Hull Size 5 Frigate would have a MCF of 5 which means at least five crew members are required to operate the ship. If the functional crew compliment falls below the MCF the player will begin to lose control of the ship. If the MCF reaches zero all of the crew members have become casualties and the ship will be considered to be adrift. A spacecraft with an MCF of zero will remain outside of the player's control until enough crew members can be restored to meet the ship's MCF.

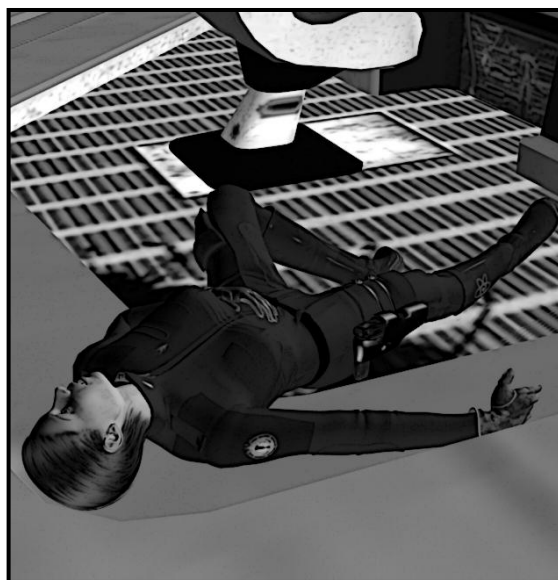


RESCUE OPERATIONS

A spacecraft's crew that has fallen below the MCF can be rescued by another ship controlled by the same player or by a third party. To accomplish a rescue a ship must transfer some of its crew to the ship being rescued without depleting its own crew compliment. The transfer of crew from the rescue ship can be accomplished through any means the rescue ship is capable of. This can include the use of ship to ship docking, launches, shuttles, space walks, or even teleportation (See Star Frontiersman Magazine Issue # 16 pg. #86 for optional teleport rules). All of which are potentially dangerous endeavors in themselves. However they may be the only chance to prevent a ship from being lost entirely.



A UPF ensign aboard the UPFS Intrepid assists a fellow officer who was wounded during a sathar attack.



"ALL HANDS LOST"

If a spacecraft's MCF remains at zero for four consecutive repair phases (Two hours in game time) all crew members will be presumed to have perished from their wounds. Ships which have lost all crew members will become derelicts and can be recovered, salvaged, or captured by another spacecraft. To attempt a recovery the player controlling the recovery ship must transfer enough crew to the derelict ship to restore its MCF. The crew compliment of the ship attempting the recovery cannot fall below its own MCF or it will risk losing control itself. For example, an assault scout with a crew compliment of five and an MCF of three does not have sufficient crew compliment to affect a recovery of a heavy cruiser with an MCF of eighteen.

Authors Note: A good example of a recovery operation using a spacewalk can be found in the classic Star Frontiers™ module "2010", by Bruce Nesmith & Carl Smith, which is based on the motion picture of the

same name. In this TSR adventure module the crew of the Soviet spacecraft Leonov transports a crew of American astronauts conducting a risky operation to recover the derelict *Discovery One* spacecraft. During the recovery operation the American astronauts have to conduct a daring space walk in order to board the *Discovery* and recover the ship.

LOSS OF CONTROL ROLL

Once a ship falls below its MCF there will not be enough qualified crew members left to continue to operate all of the ship's controls and systems. As the remaining crew struggle to maintain control of the ship and assist the wounded, the operation of the ship will become increasingly erratic and unpredictable. The following table can be used to simulate these chaotic conditions when there are not enough crew members to operate a ship's controls and systems. Each time the crew compliment falls below the ship's MCF, the controlling player will roll d100 on the Loss of Control Table to determine which of the ship's functions have been affected. The results of the Loss of Control Roll (LCR) will continue to affect the ship until the ship's MCF has been restored. If the LCR table results effect a system that is not equipped on the ship, such as a masking screen or beam weapon, the player should roll again to determine which system has lost control.

Loss of Control Table

Roll	Loss Of Control Effect
01-05	Unable to turn, MR reduced to zero.
06-10	Cannot accelerate or decelerate.
11-15	Beam weapons are inoperable.
16-20	Turn 1 hex facing left each turn.
21-25	½ DCR on next repair phase.
26-30	Unable to decelerate.
31-35	Lose 1 point of speed per turn.
36-40	½ CRR on next repair phase.
41-45	Missile weapons are inoperable.
46-50	No DCR on next repair phase.
51-55	Masking screens are inoperable.
56-60	Unable to accelerate.
60-65	ICMS and decoys are inoperable.
66-70	¼ DCR on next repair phase.
71-75	Gain 1 point of speed per turn.
76-80	Communication systems inoperable.
81-85	¼ CRR on next repair phase.
86-90	Defensive screens are inoperable.
91-95	Turn 1 hex facing right each turn.
96-00	No CRR on next repair phase.

CREW RESTORATION RATES

The Crew Restoration Rate (CRR) is a repair score that functions in the same ways as DCR and measures a crew's ability to restore crew casualties. The CRR provides a pool of points which can allocate to restore crew members back to active duty during the special repair phase of combat every that occurs every three turns. All spacecraft begin with a base CRR point pool which is equal to the ship's DCR score. However, unlike DCR, a ship's CRR score can be improved through the addition of better medical facilities and crew members with medical skills. Players can devote the entire CRR point pool to a single crew member or spread them out across several crew members. Each point allocated to a crew member provides a 1% chance that the crew member will be restored to active duty during the repair phase. For example, if you allocate 45 CRR points to a single crew member you will have a 45% chance that the crew member will be able to return to active duty. After the controlling player finishes allocating their CRR points they can role percentile dice to determine success. If the CRR role is not successful is not successful the player can make another attempt to restore the crew member(s) during the next repair phase.



CRR RESTRICTIONS

At the start of each repair phase, players will have their full CRR point pool available for allocation as needed. CRR points that the player does not use during the course of the repair phase cannot be rolled over or banked for later use. All available CRR points must be used during the repair phase or those points will be forfeited. Only one attempt can be made to restore a crew member per repair phase. Players cannot split their CRR point pool for multiple attempts to restore the same crew member. The CRR is unique to each ship and represents the efficiency, preparedness, and resources that each crew has available to them. Therefore, CRR points are not transferable between ships controlled by the same player or by an allied player. It is also important to note that while DCR and CRR are similar they are not interchangeable. DCR refers to a spacecraft crew's ability to repair damaged machinery and systems and CRR refers to a crew's ability to restore injured crew members. Players cannot use DCR points to restore wounded crew members back to active duty.



CREW AUTOMATION SYSTEMS

Some spacecraft are equipped with automation systems or robots that can perform a crew member's tasks in the event that they are injured or incapacitated. Spacecraft equipped with such systems can substitute one robot or automation computer per injured crew member without the player having to use CRR points. Crew automation systems require must be activated during the controlling player's movement phase and require one turn to activate. Players can add the automated crew member to their crew compliment on the movement phase of the next turn.

Crew automation systems, like live crew members can also be damaged and are considered as "crew" when they are in use. The robots and automation computers that are substituting live crew will be subject to casualty rolls when they are working. When these systems are offline and safely stowed away they do not have any bearing on the control of the spacecraft. Automation units in this state are not subject to casualty rolls but are also unable to assist the crew until activated. Once a functioning automation system is damaged in a casualty roll it will be recorded as a casualty on the controlling player's ship record sheet.

Damaged units will not be able to complete their tasks and must be repaired before returning to duty. Since these systems are mechanical in nature, players may only use DCR points to repair them.

A Crew automation system must be activated prior to a spacecraft's MCF reaching zero. Once the ship's MCF is at zero there will be no live crew members left that will be able to activate the system. If a player's ship currently has an MCF of zero they will have to wait until at least one crew member has been restored to active duty using CRR points during the repair phase. As a matter of safety regulations computers and robots are not allowed to activate crew automation systems. Only live crew members are authorized to activate and control the ship's crew automation systems.

In order to use a crew automation system to replace an injured crew member certain conditions must be met. First, the ship must be equipped with a crew automation system consisting of either an automation computer or robot of sufficient level and programming to operate at least one of the ship's vital functions. One automation robot or computer can perform the tasks of one crew member. So a player needs to have one automation system available for every crew member they intend to substitute. Second, the player must declare the activation and record how many units they are using on their ship's record sheet. Third, the ship's MCF must be above zero in order for someone to be able to activate the crew automation system. Ships with a current MCF of Zero must wait until they restore at least one crew member before an automation system can be activated.

CRR BONUSES

Additional bonus points can be added to your total CRR score for crew members with medical skills and medical facilities installed on your spacecraft. An additional five points can be added to your total CRR score per medical skill level of each qualified crew member. If the crew member that provides the CRR point bonus leaves the ship or is killed the ship will lose those bonus points until a replacement is found. Spacecraft which are equipped with medical facilities to treat injured crew members will also receive additional CRR point bonuses. The point bonus for each medical facility installed will depend on the type of facility and the number of crew members it can provide treatment for. If the medical facility becomes damaged or inoperable the ship will lose those bonus points until the unit is repaired.



level one module is a very sophisticated model with the latest technology, large patient capacity, and over 140 cubic meters of space. A spacecraft can be equipped with as many medical modules as its hull can accommodate. Modules can also be linked together to create larger medical facilities if needed.

Editor's Note: See more of Scott's artwork including an online comic at his project site:
<http://www.titanrising.webs.com/>

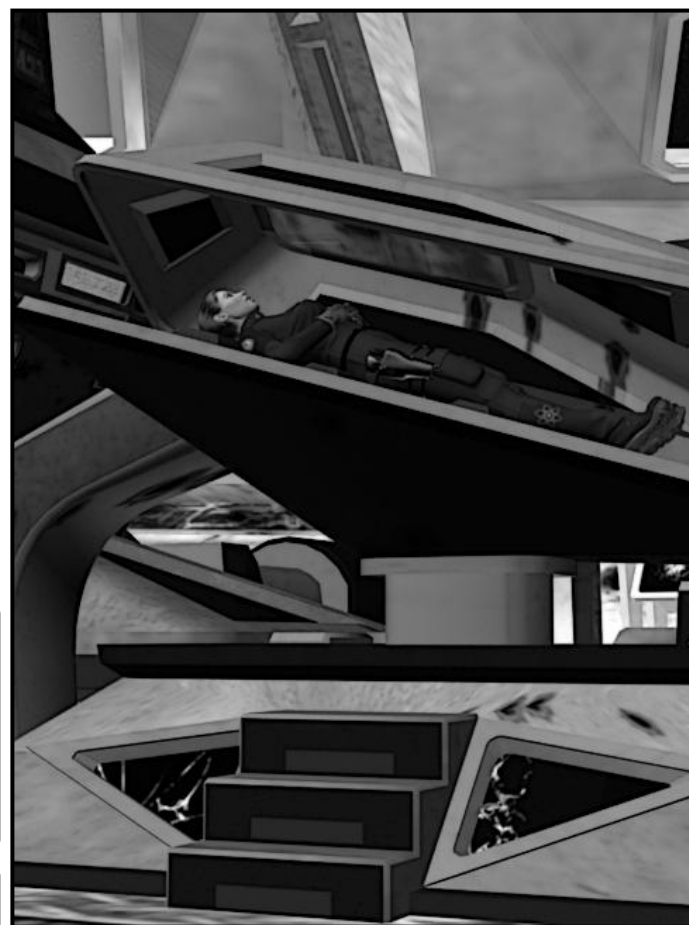
MEDICAL FACILITIES

The two most common types of medical facilities found on spacecraft are classified as either standard modules or automated modules. Standard modules are traditional style medical facilities where patients are attended to by a physician or medic. Automated modules utilize medical robotics under the supervision of a live physician or medic. The physician, or medic, evaluates the patient and then selects the treatment program which is administered by the robotic system. The advantage of automated modules is that they increase the number of patients which can be treated at the same time. Automated modules can be operated via remote control allowing one doctor to control several units. However, when operated by remote control the module's patient capacity and CRR bonus are reduced in half.

Standard Medical Modules				
Level	Patient Capacity	Cubic Meters	CRR Bonus	Credit Cost
4	Individual	10-35	+05	10,000
3	01-05	35-70	+10	25,000
2	05-10	70-140	+15	50,000
1	10-15	140+	+20	75,000

Automated Medical Modules				
Level	Patient Capacity	Cubic Meters	CRR Bonus	Credit Cost
4	01-05	10-35	+10	20,000
3	05-10	35-70	+15	50,000
2	10-20	70-140	+20	100,000
1	20-30	140+	+25	150,000

Spacecraft medical modules are rated on a descending scale from four to one. A level four module is a basic medical bay with only 10-35 cubic meters of space in size designed to treat patients on an individual basis. A



STAR FRONTIER (URS)

By Victor M. Gil de Rubio



The **Star Frontiers Universal Roleplaying Game** (URS for short) started out over 20 years ago when I started to combine all my reams of house rules into something coherent. The original rules which have long been lost were entirely based on

what we know as classic Star Frontiers (Alpha Dawn, and Knighthawks).

Seven years ago when my then gaming group disbanded I decided to collect all the game rules I had created to "fix" what I didn't like about 3rd edition Dungeons and Dragons and put it all into a guidebook, and since I no longer had a gaming group I decided to rework my D&D campaign world and restart it for a new generation. When this project started I thought that when I'd finish I would turn my attention to doing the same for Star Frontiers.

After about a year of one finger typing I had created a set of rule books which I called Advanced Dungeons and Dragons as a tribute to the game that had hooked me to Role Playing all those years ago. At this point I had the idea that I would use the core rules for the game I had basically rewritten, to create a flexible set of core rules that could be used as a framework to build all kinds of different RPG's with Star Frontiers being one of them.

Eventually I put together the URS (Universal Roleplaying System) which consisted of a Players guide, an Administrator's rule book, an expanded guide to cover rules for Psionics, mutation and stuff) and a Magic guidebook as well as the framework for the creation of creature guides, and then used all this work to create the Star Frontiers (URS) rulebooks, as one of several linked projects.

After several years of dedicated work I had version four of my Star Frontiers rules in what was to me a complete enough system for home use. At this point I found my way quite accidentally to the Star Frontiersman magazine and the community in general. I looked around and very quickly realized that I had found something I had been missing for about seven years; a group of passionate people who loved role playing games and Star Frontiers about as much as I did, and I joined in the fun.

At this point Larry Moore (who's dedication to Star Frontiers, and any project he's involved in is incredible) convinced me to share the Star Frontiers rules I had adapted with the community, and even after I created the project he has been the most vocal supporter of the project, and a guiding force in the direction the project has taken. Currently I am working on Version 4.5 of the rules which will be a more self-contained rules set that shouldn't require players and

administrators to be overly familiar with the 3rd edition d20 system to play it.

The Star Frontiers of the URS system is a lot different than the Star Frontiers universe we are all familiar with. While the core races (Dralasite, Human, Vrusk, and Yazirian) remain the same and the Humma, Ifsnit, and Osacar are there as well the Frontier now spans over 700 light years from Prenglar to the Rim and in that space there are over 50 alien races. Some of these races are not affiliated with the UPF. There are two trade cartels that control large stretches of space bordering the Frontier, and three empires that also border the Frontier and the Rim Coalition.

Humans in this alternate Frontier were the survivors of the last war on Earth (which links this rules set to the rules I created for my version of Gamma World) and who renamed their world Thesius after some dramatic events occurred in the Sol star system.

The Star Frontiers (URS) timeline sets the game 100 years ahead of the canon Frontier, and the technology does include some things that might make "Hard Sci-fi" fans uncomfortable, but my hope is to create a system that is flexible enough that taking away the super-tech won't make the game unplayable.

The last and perhaps most important difference in this campaign setting is that the Sathar have never been encountered by any race in the Frontier/Rim Coalition prior to the start of the campaign. This is because I felt that it would give administrators a great way of making their individual campaigns unique in how they introduce and utilize the Sathar in their game.

In the future, the Star Frontiers (URS) project will consist of a Player's rulebook, an Administrator's guidebook, and the Knighthawk's guidebook as core rulebooks. There will also be a group of guides detailing such things as areas of the Frontier, robots, vehicles, and what lies beyond the Frontier. In addition to these books there will be at least four guidebooks detailing creatures to challenge the players of the game.

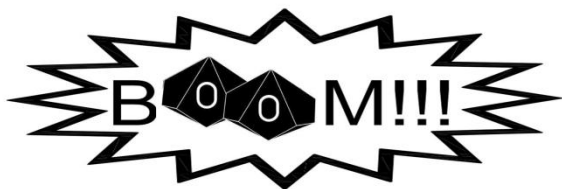
The Star Frontiers (URS) system was and always will be at its core a set of house rules created and adapted for the love of the game, and not to make a profit. The rules and all materials being produced in this project is for home use only, and not ever be distributed for a fee, or were created to take any profits from the owners of the copyrights to the Star Frontiers brand.

Though I know that the Star Frontiers set I have been working on will never surpass the original Star Frontiers game in popularity I am hoping that it can offer players an interesting alternative and maybe some fun new stuff to play with. If you'd like to learn more about the Star Frontiers (URS) project, or would like to share an idea or two, feel free to join the Project, we could always use talented people with new ideas to make this project better.

Project Home: <http://www.starfrontiers.us/node/4345>

EXPLODING DICE

By Chris Harper



"Exploding Dice" is a common term in role-playing games today. If you roll the highest number on the die you roll that die again and add the result. Savage Worlds and Legend of the Five Rings among others use exploding dice. I think this is a cool mechanic and can work well for Star Frontiers. It adds a 'wild card' factor to game play.

DAMAGE:

Using exploding dice for damage is very easy. Simply roll damage, all 10's get re-rolled and added to the damage roll. This can make for a more exciting and deadly game.

SKILL ROLLS

Martial Art Skill Mechanic: Skill rolls are a little tougher because Star Frontiers rewards rolling lower percentiles. In the Alpha Dawn book, the mechanic for nerve combat (Martial Arts skill) allows an opponent to be knocked out +1% per skill level or rolling a "0" on the ones die, as long as it's under the listed success rate. Thus a 4th level martial arts skill knocks a target out on a roll of 01, 02, 03, 04, 10, 20, 30 and 40. This takes into account unusual success.

Imploding Dice Mechanic: These types of rolls should count for other skill rolls as well. Use the same mechanic above with a twist; we'll call it "Imploding Dice". If you roll 1% per skill level and a "0" on the ones die you get to roll again. If succeeding a second time the Referee will explain your unusual success. In the case of the martial arts skill the Referee may allow you to take an extra attack or action. Non-Combat skills may give you some added information or increase the success of your current action beyond normal.

Note: if the Referee can't give you an unusual success ask him if you can get a bonus on your next skill check.

In Legend of the Five Rings this is called raises. A character would get knowledge or success above and beyond what they were shooting for. This is pretty free form. The Referee will have to decide the type of reward.

For example: Teela is trying to hot wire an air car using her Tech skill. She rolls "01", and the air car starts up. Teela rolls again and gets another success. The Referee decides while hot wiring the vehicle she noticed a tracking device mounted under the dash.

Give it a try and let me know what you think, write to submissions@starfrontiersman.com in care of Chris Harper: Exploding Dice



RADIATION SICKNESS ON THE FRONTIER

By Thomas Verreault/ jedion357

The equipment list in Zebulon's Guide (ZG) included a new medical item called Neutrad. It's an injectable medication for treating radiation exposure. The books states that, "Radiation poisoning is most commonly caused by nuclear battery or plant leakage or by a character being exposed to ancient nuclear weapons or their residue in nuked areas." This statement actually fails to cover all the possible vectors of exposure to radiation in the Frontier. The paragraph on the medicine also seems to imply that one injection and a skill roll and radiation sickness goes away. In the skill description section of ZG there is a rule mechanic for radiation sickness but it is in the ZG "column shift mechanic". None of this gives a clear picture of the use of radiation poisoning in the Star Frontiers setting or makes it very accessible to referees. With this article I will convert and update the existing mechanic to the Alpha Dawn (AD) game mechanic, describe vectors for exposure to radiation for game characters, and propose race based effects from radiation exposure.

THE GAME MECHANIC

The game mechanic for radiation poisoning in AD terms is -10/R20. This formula means the character suffers -10% to all skill and ability checks for twenty days. The negative is variable up or down and the R20 indicates radiation sickness and the number of days it lasts. If the formula was followed by an "!" then death will occur at the end of the duration. The severity of the radiation exposure can be adjusted by increasing or decreasing the penalty and duration or adding "!" for death as the end result.

In reality humans who suffer full body exposure to gamma rays or x-rays at 100 roentgens become sick. Those who receive full body exposure at 400 roentgens become sick and half die in 30 days but nearly all die without medical treatment. Those who receive full body exposure at 1000 roentgens fall unconscious and die within an hour.

In order to present these levels of radiation exposure in a game with multiple alien races it will be best to simply establish abstract levels of exposure for game purposes guided by the above facts.

In the table below there are 3 levels of exposure; mild, medium, and severe. These are determined by the source of the radiation (see chart below). Each level of exposure has time increments of Brief, Moderate, and Prolonged. Brief is generally only 1 to 2 hours exposure or less. Moderate is generally 3 to 10 hours (up to ½ a day). Prolong exposure is 10 to 20 hours (or ½ to a full GST day). The column for radiation sickness describes the effects of the sickness in the game mechanic. The column for death indicates if death is possible. It will

either say Yes, No, or STA. If the entry is STA the character must pass a STA check at the end of the time duration or death is possible. The treatment column describes how standard medical treatment (Cure Disease subskill with neutrad injection performed once per 10 day GST week) will impact the sickness.

Exposure	Sickness	Death	Treatment
Brief Mild	-10/R10	No	Cured no further ill effects
Moderate Mild	-10/R20	No	No further effects after 10 days
Prolonged Mild	-10/R30	STA	No further effects after 20 days
Brief Medium	-20/R10	No	Reduced to -10 penalty
Moderate Medium	-20/R20	STA	Reduced to -10 penalty
Prolonged Medium	-20/R30!	Yes	Reduced to -10 penalty, Death on a failed STA
Brief Severe	-30/R10	STA	Reduced to -20 penalty
Moderate Severe	-30/R20!	Yes	Reduced to -20 penalty, Death on a failed STA
Prolonged Severe	-30/R30!	Yes	Reduced to -20 penalty

If a character requires treatment for radiation sickness lasting longer than 1 GST week (10days) and is treated in the first week but miss's treatment at the start of the subsequent week then he must pass a STA check or the ill effects that were cured/reduce by the prior week's treatment return in full force. It's in a character's best interest to not miss a treatment if possible.

Finally, if death is the end result of radiation sickness the character may still survive. A medic may make a Cure Disease subskill roll while applying a dose of neutrad modified by the skill/ability penalty of the severity (-20 for medium and -30 for severe) and further modified by each successful week of treatment with neutrad (+10/ week) and +20 if in a hospital setting. Due to the length of times involved a character with severe radiation sickness that is facing death will have the opportunity to seek out a hospital with high level doctors before his impending death. If the medic fails to save a dying character he also has one chance to freeze field him till better treatment can be obtained.

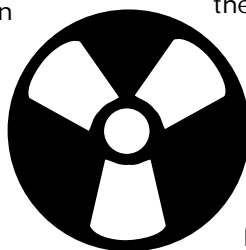
RADIATION IN THE GAME ENVIRONMENT

There are two basic types of radiation; ionizing and non-ionizing radiation. Non-ionizing radiation, coming from sources like light, radio waves, microwaves and radar, does not generally cause tissue damage. Ionizing radiation, which comes from x-rays, gamma rays, and particle bombardment (neutron beam, electron beam, protons, mesons and others), can have immediate effects on living tissue. Exposure to these types of radiation can be from medical testing and treatment, industrial and manufacturing processes, weapons and others.

In the game environment most players know that a star ship engineer's tool kit comes with an insuit, an insulated suit to protect the engineer while working on

atomic engines particularly during overhauls, (Knight Hawks pg. 63). What is often overlooked is the danger from star ship combat, all crew in a combat situation should be wearing an insuit. Ship weapons like the disruptor cannon, proton beam, electron beam, and the torpedo (its nuclear armed) are all sources of ionizing radiation. Crew in areas of the ship that are damaged by such weapons will be exposed to some level of ionizing radiation. The referee makes the call on this but the table below can be used as a guide.

The above quoted statement in ZG names leaking nuclear batteries and power plants as a vector for encountering radiation. What is interesting is that nowhere in the rules does a nuclear battery appear. As for power plants, the AD equipment list has 4 types of generators and states that they need, "an outside force of some kind: solar, nuclear....." To be charitable the rules covering power generators are a bit thin. In addition, the atomic engines of a star ship can supply it with power so that these are a de facto power generator. I've often viewed the atomic engines as a reactor and used them as such with the caveat that if they are intended to function strictly as a power source and not a method of propulsion then they are purpose built reactor that any star ship engineer would be very comfortable working on. The statements about leaking batteries and plants really suggest plot devices since there were no real means by which a character might be exposed to radiation in this way. The idea being that a referee could introduce hazards in an adventure by stating that the installation or base's nuclear reactor is leaking forcing them to locate insuits, neutrad doses, or just plain hurry their activity to limit the exposure.



Source of Exposure	Game related Severity
Disruptor cannon striking area of ship where character is located.	Brief & Medium
Electron beam striking area of ship where character is located.	Brief & Medium
Proton beam striking area of ship where character is located.	Brief & Medium
Nuclear ordinance striking ship	Moderate & Medium
Fallout from a nuclear blast in the first 5 weeks after the blast (begins arriving at ground zero with in an hour)	Varies due to circumstances but typically Medium to Severe and time element is at the Referee's discretion.
Fallout from "clean" pocket nuke during the first 5 weeks after the blast	Varies due to circumstances but typically Mild to Medium and time element is at the Referee's discretion.
Exposure to unshielded atomic drive- attempting to overhaul without an insuit	Mild with time element determined by hours: 1-2 = Brief, 3-10 = Moderate, 10-20 = Prolonged
Exposure to a "leaking" nuclear battery- typically a hazard that is part of a setting by Referee fiat	Varies due to circumstances but typically Mild to Medium with time element determined by hours: 1-2 = Brief, 3-10 = Moderate,

Exposure to a "leaking" nuclear plant- typically a hazard that is part of a setting by Referee fiat

10-20 = Prolonged
Varies due to circumstances but typically
Medium to Severe with time element determined by hours:
1-2 = Brief,
3-10 = Moderate,
10-20 = Prolonged

Ancient and unstable nuclear weapons

Varies due to circumstances but typically
Mild to Medium with time element determined by hours:
1-2 = Brief,
3-10 = Moderate,
10-20 = Prolonged

Weird alien artifacts

Varies due to circumstances but typically
Mild to Severe with time element determined by hours:
1-2 = Brief,
3-10 = Moderate,
10-20 = Prolonged

Radioactive waste

Varies due to circumstances but typically
Mild to Medium with time element determined by hours:
1-2 = Brief,
3-10 = Moderate,
10-20 = Prolonged

* wearing an insuit is an effective defense against radiation exposure.

EFFECTS AND SYMPTOMS OF RADIATION SICKNESS BY RACE

The table below list radiation sickness symptoms by race but it's purely for subjective color as the game mechanic imposes an objective effect in game terms. The table also lists an optional racial effect from radiation exposure. This optional effect is largely for color and does not try to be balanced or fair, thus it is optional.

HUMANS

- Bleeding from the nose, mouth, gums, and rectum
- Bloody stool
- Bruising
- Dehydration
- Diarrhea
- Fainting
- Fatigue
- Hair loss
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Mouth ulcers
- Nausea and vomiting
- Open sores on the skin
- Skin burns (redness, blistering)
- Sloughing of skin
- Ulcers in the esophagus, stomach or intestines
- Vomiting blood
- Weakness

Optional Effect: None

DRALASITES

- Bruising
- Dehydration
- Fatigue
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Skin burns (redness, blistering)
- Sloughing of skin
- Increase in the time it takes to form a limb (usually double the time)
- Weakness

Optional Effect: Extra -5 penalty when sickness results from fallout.

VRUSH

- Dehydration
- Fainting
- Fatigue
- Pre-mature shedding of carapace
- Ulcers on the mandibles, antennae or anus
- Weakness
- Change in carapace color

Optional Effect: -10 days duration to Mild but must decon even if not suffering effects from Mild exposure.

YAZIRIANS

- Bleeding from the nose, mouth, gums, and rectum
- Bloody stool
- Bruising
- Dehydration
- Diarrhea
- Fainting
- Fatigue
- Hair loss
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Mouth ulcers
- Nausea and vomiting
- Open sores on the skin
- Skin burns (redness, blistering)
- Sloughing of skin
- Ulcers in the esophagus, stomach or intestines
- Vomiting blood
- Weakness

Optional Effect: Temporary loss of Battle Rage and too weak to glide if Medium to Severe exposure.

SATHAR

(Purely conjectural)

- Fatigue
- Inflammation of exposed areas (redness, tenderness, swelling)
- Development of physical mutations
- Weakness
- Dehydration

Optional Effect: Exposure to radiation can cause mutagenic changes. Referee may introduce mental or physical changes to sathar characters with radiation exposure

HUMMA

- Bruising
- Dehydration
- Fainting
- Fatigue
- Hair loss
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Mouth ulcers
- Open sores on the skin
- Skin burns (redness, blistering)
- Sloughing of skin
- Weakness

Optional Effect: Medium to Severe causes sex change from female to male or male to neuter.

OSAHAR

- Bruising
- Dehydration
- Intermittent audio hallucinations
- Fainting
- Fatigue
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Mouth ulcers
- Nausea and vomiting
- Open sores on the skin
- Weakness
- Religious experiences

Optional Effect: All penalties reduce by -5 due to natural radiation resistance.

IFSHNITS

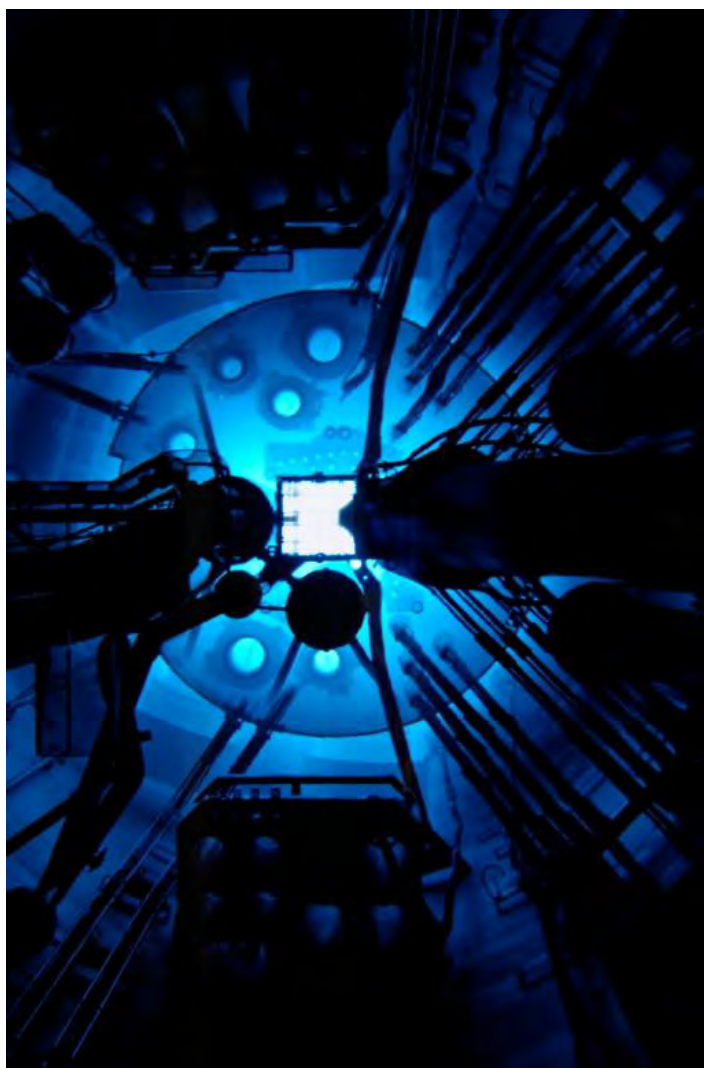
- Bleeding from the nose, mouth, gums, and rectum
- Bloody stool
- Bruising
- Dehydration
- Diarrhea
- Fainting
- Fatigue
- Hair loss
- Inflammation of exposed areas (redness, tenderness, swelling, bleeding)
- Mouth ulcers
- Nausea and vomiting
- Open sores on the skin
- Skin burns (redness, blistering)
- Ulcers in the esophagus, stomach or intestines
- Weakness

Optional Effect: All penalties increased by +5 due to low mass.

In the real world, exposure to radiation can have long term health effects. In the game, if a referee is mixing in "Gamma World" elements into his campaign long term effects will certainly be appropriate like emerging mentalist powers or physical mutations. Even if the campaign is not as fantastic as a typical Gamma World game the long term health effects can still be introduced later in the campaign as a plot hook. A possible plot hook could be the character's heart has been severely damaged from the exposure. His corporate employer will pay for an artificial heart but has a little string attached.

References:

1. <http://health.nytimes.com/health/guides/injury/radiation-sickness/overview.html>
2. http://en.wikipedia.org/wiki/Nuclear_fallout



Unclassified UPF engine core; note the Verreaulti-Vents in the sublevel floor.

GAME RESOURCES

TRADE GOODS AND COMMODITIES OF THE FRONTIER, PART ONE

By Allen Trussell

There are numerous plants found throughout the worlds of the Frontier and Rim, and a wide variety of these are edible to most races. Some of these can be eaten raw, prepared in various dishes, or used as seasoning. Below is presented a mere sample of the vast variety of vegetables, herbs and fruits traded among the races of the Frontier. Prices listed are given for both personal use and bulk purchases; these prices may vary. Where the food is more plentiful, prices will likely be lower, while areas of high demand will have inflated prices.

Aghrom

Grown on many dralasite worlds, this reedy plant thrives in marshes and wetlands. It is most prized for its pulpy stalk, which can be processed for sugar. Aghrom stalks are also sold raw, where they are most commonly roasted, creating a crisp, puffy sweet treat.

Cost: 2Cr per kg; 1,800 per ton



Amelo

This fruit is common to Prenglar, and is similar to the many citrus fruits (lemon, orange, etc.). It is a large, pinkish-orange fruit, with a peculiarly biting flavor. High in vitamins, it is a valued commodity, though an acquired taste.

Cost: 2Cr per kg; 1,700 per ton



Asperic

This spice is the dried, ground leaf of the asperic plant, grown solely on Minotaur. It is a pale beige powder, and has a strong, bitter flavor. It also is a flavor enhancer, and is added sparingly to a variety of dishes. Vrusk find asperic particularly unpalatable, while yazirians prize it.

Cost: 3Cr per gram; 2,800 per kg; 26,000 per ton



Bacaya

The fleshy, yellow fruit of the plant, this flavorful item is grown on many worlds and has become a staple in Frontier diets. Although it is a starchy fruit, is not sweet and is prepared like many vegetables. Fried, roasted, boiled and steamed, bacaya has a robust flavor and is packed with nutrients.

Cost: 1Cr per kg; 800 per ton

Bacaya

**Bacca Nut**

Grown on Athor, and a few other yazirian worlds, this large nut is flavorful and nutritious. Most races find the flavor very agreeable, though dralasites find bacca nuts bland and boring. Bacca nuts can be eaten raw, but are at their best when roasted.

Cost: 2Cr per kg; 1,700 per ton



Bacca Nuts

Bannut

A nut from the banna tree of Triad, bannuts are sweet, meaty nuts with a pale color. The shell of the bannut is very hard, and when removed can be fire-hardened and made into decorative gifts. The nut itself is a staple of many trail mixes or sold separately as its own treat, often salted or sweetened.

Cost: 2Cr per kg; 1,800 per ton

Baslic a gray-green leafy herb, the baslic plant hails from Gollywog, where it grows in a variety of climates. It has a strong flavor, and it somewhat sweet and peppery. Baslic is sold both fresh and dried, and is used as a flavoring agent for numerous dishes.

Cost: 3Cr per kg; 2,800 per ton

Camon this hard, red fruit is found in the salt shores of Pale, and has resisted cultivation. Its flavor is biting, and astringent. If not for its



Baslic

nutritional value, most races would not even consume it. Best used paired with other, more palatable foods, it can

also be dehydrated and packed into ration bars, where its flavor is diminished and its nutrition shines.

Cost: 4Cr per kg; 3,900 per ton

Caspberry

These small, whitish-yellow berries grow in clumps on the caspvine of Terledrom, where dralasites have long cultivated them. The intense, sweet flavor of these berries is enjoyed by every race in the Frontier, and caspberrys are eaten fresh, in baked goods, made in juice or wine, or in jellies and jams.

Cost: 2Cr per kg; 1,800 per ton

Chale

The leaves and stems of the plant, chale is a delectable vegetable from Gran Quivera, though it has been cultivated elsewhere. The earthy, simple flavor of chale is best when slightly cooked, though is delicious raw, steamed or boiled.

Cost: 2Cr per kg; 1,800 per ton

Chelamint

This pale bluish-green plant grows on Yast, and has an intense hot, peppery mint flavor. Yazirians especially prize this mint, and believe it has aphrodisiac qualities, though no know compound in the chelamint has been proven to have such quality. In dralasites, chelamint flavored foods cause a minty odor, which is quite pleasing.

Cost: 3Cr per gram; 2,800 per kg; 26,000 per ton



Baslic

Chi'chat'l

A green, hard fruit found on Ken'zah-Kit and cultivated everywhere vrusk live, chi'chat'l is a staple of vrusk diets, though most other races find it bland or unpalatable. It is consumed raw, roasted or fried, and is nutritious.

Cost: 2Cr per kg; 1,700 per ton

Chyctoss

A green, leafy plant common to the wetlands of Morgaine's World, chyctoss is quickly being cultivated elsewhere. It has a mild flavor, which is heightened by cooking. It is an excellent source of fiber and is very nutritious. Chyctoss has also proven itself as a meat substitute, and is growing in popularity among vegetarians in the Frontier and Rim, especially among ifshnits.

Cost: 3Cr per kg; 2,700 kg per ton

Cimagus

This is a large, fleshy orange root vegetable with a tart flavor, grown on the plains of Rupert's Hole. Cimagus is served fried, baked or boiled, and is rich in fiber. Cimagus is despised by yazirians, who find its flavor revolting. Cimagus can be juiced, and the juice has occasionally been fermented into an orange "beer" that

only humans seem to be able to imbibe. Either the juice or beer will stain the lips and mouths of humans who drink it a dark orange.

Cost: 2Cr per kg; 1,800 per ton



Cyciarram

This is an oblong, greenish-yellow fruit from Kraatar, which is also prized for its beautiful yellow flowers. Cyciarram fruit is very sweet, and is often juiced to sweeten other foods, or made into wine or liquors. The cyciarram is a prized by both the vrusk and humans of Kraatar, and the government has often used it as a symbol of unity for that troubled world.

Cost: 3Cr per kg; 2,800 per ton

Dakko

This is the dried and ground gray bark of the dakko tree native to Groth. Dakko is a strong flavored spice, used on numerous meats, but also steeped in boiling water and drank as a tea among dralasites. Most other races find dakko tea unpleasant, but can drink it. Dralasite monks of Groth long ago developed a dakko tea ceremony, which is still honored today.

Cost: 4Cr per kg; 3,800 per ton

Dukeer

A bluish-violet fruit from Osak, this is showing up infrequently in shops around the Frontier. The dukeer has a sweet, spicy flavor, but little nutritional value. The skin of the dukeer is tough, and if oiled and dried can be made into a leather-like material, suitable for light industrial uses. Dukeer is best eaten raw, either alone or in salads, as cooking tends to destroy the flavor and turn the soft flesh of the fruit into goo.

4Cr per kg; 3,700 per ton

Durran

This is the leaf of the durran bush, grown on Inner Reach, used either fresh or dried. It has a heavy, earthy flavor, and is a savory seasoning for many meat dishes. Durran has a suppressant agent, and can cause a comfortable lethargy in most eaters; this agent is sometimes concentrated and sold as a drug, both legally and illegally, throughout the Frontier.

Cost: 2Cr per gram; 1,800 per kg; 16,000 per ton

Eghric

The leaves of the eghric plant of Athor make a strong tea. Eghric has little other use, and the eghric tea plant take many standard years to reach maturity

before it can be harvested. Eghric tea is rich and flavorful, and the leaves are prepared in variety of ways – smoked, roasted, raw, dried, steeped in fruit juices, etc. The eghric plantations of Athor fiercely guard their particular variety, and clans have fought over land and trade rights.

Cost: 5Cr per gram; 4,900 per kg; 47,500 per ton

Etil

This small, blue-green leafy plant is native to Histran, where it is heavily cultivated. The leaves have a delicate, slightly sweet flavor, and is used in many salads and sandwiches. Etil is high in starch and fiber, and is high in essential minerals.

Cost: 2Cr per kg; 1,700 per ton

Ganiak

The long, twisted green-white root of the ganiak plant is often sold in ifshnit markets, though they do not say where it is cultivated. So far, no successful plantings of ganiak has been completed in the Frontier. The flavor of ganiak is bitter and starchy, though it enhances flavor and is often paired with other vegetables.

Cost: 3Cr per kg; 2,800 per ton



Grawbello

A small, round fruit with a hard yellow rind grown on Groth, the sweet orange-pink fruit of this melon is prized by vrusk. Best eaten raw, the juice is also flavorful; the seeds of the grawbello are also tasty when roasted and lightly salted. The empty rind is sometimes carved with faces, shapes or messages, and then dried to make decorations.

2Cr per kg; 1,700 per ton



Inikfruit

The inik tree of Lossend produces a long, orange-red fruit that is high in starch and nutrients. It has a bland flavor, and is often paired with more flavorful fruits. Its rind can be hardened in the manner of a gourd, and is often decorated and used as an ornament.

Cost: 3Cr per kg; 2,800 per ton

Karreega

This is a thick, lumpy root vegetable, with a pink flesh. Originally cultivated on Gran Quivera, karreega has spread too many worlds, and thrives in cool, dry climates. When cooked, the color and spicy flavor intensify, becoming bright pink. Dralasites find the appearance of karreega amusing, and vrusk particularly savor the taste. Karreega is most often boiled or steamed, though it can be roasted as well.

Cost: 2Cr per kg; 1,700 per ton

Ki'irdt

A small nut from the ki'di'ckt tree of K'sta-Kit, ki'irdt has a rich, buttery flavor and golden brown color. It is high in protein, and very nutritious, though it must be roasted before consumption, as it is mildly toxic in its raw state. Ki'irdt nuts are eaten alone, mashed into a paste, or paired with sweets; some humans are allergic to ki'irdt, and should avoid eating any foods prepared with ki'irdt.

Cost: 3Cr per kg; 2,750 per ton



Kipplat

The red-violet stalks and leaves of this plant from Kdikit, it grows in sandy, wet soils. Kipplat has a heavy, earthy flavor, and requires long periods of cooking to soften before it can be eaten. Rich in nutrients, it is nonetheless a rather unpalatable food, and is usually paired with strong meats, vegetables and other seasonings to mask its taste. Kipplat pie, which is a minced meat and vegetable good, is one of the only popular dishes made with kipplat.

Cost: 2Cr per kg; 1,500 per ton

Lurine

The squat yellow fruit of this bush, lurine is common to Minotaur, but has been successfully cultivated on other worlds. Lurine has a pleasant, sweet flavor, and a fibrous flesh; the tough skin is inedible. Lurine is usually served raw, though cooking softens it, making its texture more pleasing. Lurine juice and liquors are also appreciated throughout the Frontier.

Cost: 3Cr per kg; 2,700 per ton

Lycile

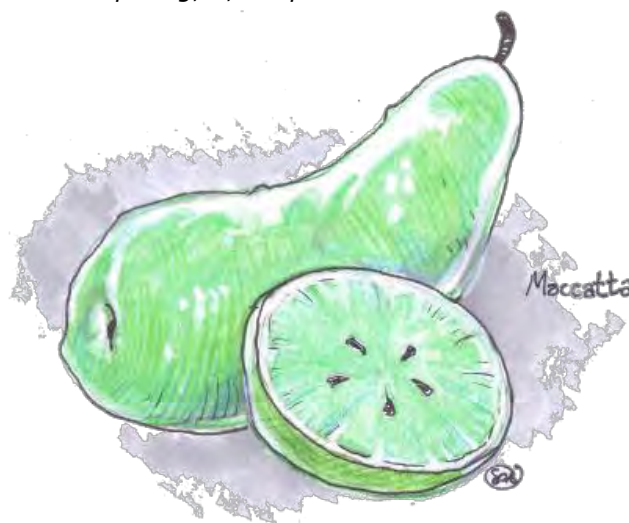
A root vegetable grown on Histran, lycile is a dark red, tough, and layered much like an onion. It has a sweet, hot spicy flavor, and stains other foods it is cooked with. Lycile can be steamed, boiled, roasted or fried, and largely must be cooked in order to soften it for consumption. Humans and yazirians who eat diets heavy in lycile tend to have deep red lips.

Cost: 2Cr per kg; 1,800 per ton

Maccatta

This is a large, pulpy fruit found on every yazirian world. The soft green fruit is strongly flavored, and vrusk find the smell intoxicating; vrusk in fact can be mildly affected by eating maccatta, and addiction is a possibility. Dralasites find the taste and smell of maccatta repugnant, and refuse to eat the fruit or foods prepared with it.

Cost: 2Cr per kg; 1,700 per ton



Mansil

These are small, dark red to purple black drupes that grow in clusters of two or three, found exclusively on Laco. Mansils are tart-sweet, and most often used in pies, tarts, pastries and jellied, where sweetness is added. Mansils come in several varieties, and have been cultivated on other worlds, most notably Pale, New Pale and Morgaine's World.

Cost: 3Cr per kg; 2,800 per ton

Naghy

This herb is the leaf and stalk of the bush, grown on Yast. It has a rich flavor that pairs well with root vegetables as well as fowl or fish. It also makes a fine green tea, and is enjoyed by many races. Naghy grows only in a narrow region of high elevation, though it has been cultivated for generations.

Cost: 5Cr per gram; 4,800Cr per kg; 45,000 per ton

Nyghrex

This large blue-white flower from Groth produces seeds, buds and petals that are all edible. The flavor of each part is sour in varying degrees, and this is often heightened by pickling. The pickled nyghrex (seeds,

buds or petals) are then used as savory garnish in a variety of dishes.

Cost: 3Cr per gram; 2,800Cr per kg; 27,500 per ton

Ospba

This root vegetable from Wonma is tough, large and bitter. Its dark green skin is inedible, and the yellow-white flesh is too tough to eat raw. Once cooked (boiled, steamed or roasted), the flavor is mellow, buttery and rich. Ospba is a staple of ifshnit diet, and is gaining in popularity in the Frontier.

Cost: 1Cr per kg; 900 per ton

Paryang

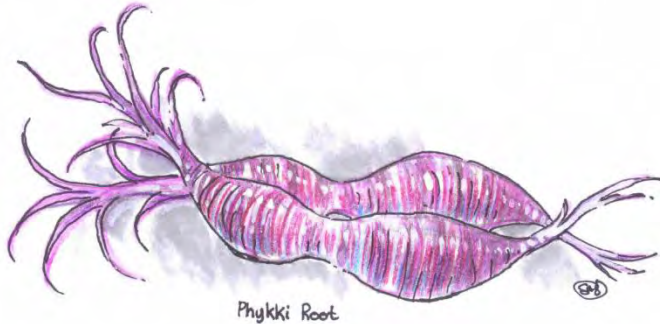
This tropical fruit from Rupert's Hole is a small, round yellow-orange to red drupe with a sour-sweet flavor. It is nutritious and filling; the juice is often fermented into a sweet orange-colored liquor. Paryang grows year-round on Rupert's Hole, and a yearly festival is held in honor of this useful commodity.

Cost: 2Cr per kg; 1,700 per ton

Phykki Root

A root plant from Hakosoar, this purplish vegetable is slightly sweet and spicy, and has a natural stimulant. It is used in many ways, as a vegetable or spice, roasted, boiled or steamed.

Cost: 5Cr per kg; 4,000 per ton



Plara

This fruit has a tough, spiny rind which protects the soft white flesh within. It grows on Morgaine's World, and is prized for its delicious sweet juice. Plara juice is drank plain, fermented into a cider, or used to fortify other juices or sweeten foods.

Cost: 2Cr per kg; 1,800 per ton

Poranger

The blue rind of an otherwise inedible fruit, poranger is sold dried and ground from Ken'zah-Kit. Poranger is a spicy, hot seasoning, used in meats, some vegetables, and even for sweets. It contains both stimulant and aphrodisiac properties, and is often prized for this more than its culinary qualities.

Cost: 4Cr per gram; 3,800Cr per kg; 35,000 per ton

Pura

This tall grass grown on Rupert's Hole yields a rich, russet grain used in breads, beer, and as a raw flour. Pura is a hybrid of several grains (technical name PuraCale, originally created by Pan-Galactic Corp, but now applied to most grain grown on Rupert's Hole) that escaped into the wild and has become both wild and

cultivated. Pura is a staple of human diets, and appreciated by all races.

Cost: 1Cr per kg; 800 per ton

Pyproli

The stalk of this tall grass from Morgaine's World, only recently cultivated. Pyproli stalks are yellow-green at harvest, and best used before they dry out. When prepared, the bright yellow vegetable is mellow, starchy and a little bland, but takes to any dish. Pyproli can be steamed, baked, roasted, boiled or fried, and is full of fiber.

Cost: 3Cr per kg; 2,700 per ton

Rr'chint

This small bushy plant from Ken'zah-Kit produces the fine green leaves, which is sold fresh or dried. The herb has a sharp, peppery flavor and is an excellent seasoning for meat, fowl or fish. Humma find it to be a stimulant, and are especially fond of rr'chint; humma are known to prepare an herbal tea from fresh rr'chint leaves.

Cost: 3Cr per gram; 2,800Cr per kg; 25,000 per ton

Recco

A nut from the tree grown on Kdikit, recco is inedible in its natural state, but once shelled and roasted, it has a rich flavor. Like coffee, it contains a powerful stimulant, but it is stronger than caffeine and has a much different flavor. The recco nut can be eaten roasted, but is more often ground and infused into hot water, using various methods. This concoction is most often drank straight, as the spicy, musky flavor does not pair well with anything.

Cost: 3Cr per kg; 2,600 per ton

Sagon

A fine grain grown on Pi'Ka'Nair, it is a common commodity from the Rim traders. It isn't as flavorful as Pura, but is nutritious, and just as versatile. The grain is a creamy yellow, and the raw flour is beige; some humans find the flavor of sagon disagreeable, but most other races enjoy it.

Cost: 2Cr per kg; 1,700 per ton

Satea Nut

A rare delicacy marketed only through Star*Drinks (a subsidiary of Star*Play Enterprises), satea nuts are rich, flavorful and high in protein. No one knows where Star*Drinks gets satea nuts; it is assumed that it is some sort of proprietary hybrid and grown in a secret location on Minotaur. Satea nuts are sold roasted, in nutrition bars or baked goods, all through Star*Drinks locations.



Cost: 4Cr per serving; 25Cr per case (12 servings); 4,100 per ton (166 cases)

(Note: The bulk prices are only available through license with Star*Drinks to distribute to Star*Drinks stores, and end purchase prices are non-negotiable.)

Tessary

A pulpy root vegetable from Morgaine's World, it is found both wild and cultivated. The thin yellow skin and whitish-yellow flesh are both edible, and best prepared by steaming or boiling. It is starchy, bland and fibrous, but pairs well with most foods. Tessary is quickly becoming a staple food in the Frontier, due to its abundance, ease of cultivation and simple preparation.

Cost: 2Cr per kg; 1,700 per ton

Tharliss

A flower indigenous to Kawdl-Kit, its bright red-orange stamen is used as a spice in many vrusk dishes. The strong, musky flavor is favored by many other races, though food prepared with tharliss tends to change dralasite skin yellow for a standard day or so after eating.

Cost: 2Cr per gram; 1,800Cr per kg; 15,000 per ton

Torrine

This is a brown fungus common to Groth, though it has been resistant to cultivation. It is richly flavored, and is best friend and paired with meat, fish or fowl. Torrine is not favored by yazirians, who find its texture unpleasant.

Cost: 3Cr per kg; 2,800 per ton



Warjoe

A leafy herb, this plant is grown on Pi'Ka'Nair, and is common through the Rim planets, but only just introduced to the Frontier. Warjoe has a sweet, minty flavor, and is often used in sweets, pastries and some herbal teas. Vrusk find warjoe especially flavorful, and highly prize this herb.

*Cost: 3Cr per gram;
2,800Cr per kg; 26,000
per ton*



d100 BOOK AND ADVENTURE TITLES

Have you ever needed the title for a book within the setting? Below you'll find a d100 list of popular titles tailor made for the next time the player characters search a sleeping cabin on a captured pirate cruiser. These work for Adventure Titles as well.

d100 Title

1	Ambushed in the Hidden Book
2	Assaulted in the Laco Desert
3	Bewitched in the Pyramid of Destruction
4	Birth of the Shadowy Creature
5	Blinded by the Eidolon of the Marshes
6	Captain that Dreaded the Trylon
7	Captives of the Crater of the Clouds
8	Conquered by the Machinist of Time
9	Daughter of the Terrible Web
10	Defeat of the Orb
11	Doom's Threatening Nebula
12	Enchanted by the Creature of Infinity
13	Enslaved by the Abominable Inventor
14	Ensnared by the Lizard of Chaos
15	Escape From the Missile of the Sea
16	Exploding Professor of Pale
17	Forgotten by the Giant Automaton
18	Forgotten by the Soaring Inventor
19	Forgotten Spider
20	Gollywog's Howling City
21	Last Days of the Asteroid Base
22	Master of the Scientists
23	Master of the Spectral Pirate
24	Missile that Engulfed the Pylons
25	Overshaw's Gleaming Glacier
26	Paralyzed in the Ebony Laboratory
27	Pohl's Pitiless Cube
28	Pursued by the Seamstress of the Tabernacle
29	Rescued by the Bride of the Chasm
30	Rescued by the Puppeteer of the Tetrahedron
31	Shrieking Gears
32	Shrunken by the Azure Creature
33	Spared by the Profane Captain
34	Spared in the Carnelian Tomb
35	Terror of the Wasteland
36	Terrorized by the Celestial Parrot
37	Tetrahedron that Rescued the Outpost
38	The Accursed Ferret of the Abyss
39	The Alternate Puppeteer of Fear
40	The Astronomer from Outside the Lightning
41	The Bright Fleet of Sirius
42	The Circling Pirate of Tomorrow
43	The City of Groth's Laboratory
44	The Colossal Galaxy of the Void
45	The Crystal from Within the Citadel
46	The Day of the Tomb
47	The Dome from Beneath the Island
48	The Electrical Space Beast of Hakosoar
49	The Fatal Jungle of the Void
50	The First Museum of Terror
51	The Girl of Neptune's Saucers
52	The Idol of Kuttner's Dust

53	The Immortal Librarian of Starvation
54	The King that Mocked the Mathematician
55	The Lieutenant of Pohl's Stars
56	The Meteors of Bok's Molecule
57	The Microscopic Outpost of Sirius
58	The Moon of Jupiter's Pyramid
59	The Ominous Chemist of Canopus
60	The Parrot of the Museum
61	The Pilot that Conquered the Harp
62	The Plague of the Improbable Lyre
63	The Puppeteer that Outraced the Astronomer
64	The Pyramid of Tumithak's Ray Gun
65	The Rise of the Librarian of Twilight
66	The Sacred City
67	The Sacred Comet of Love
68	The Scholar of The Moon's Bridge
69	The Screaming Meteors of the Planets
70	The Screaming Whale of the Unknowable
71	The Secret of the Miniature Brain Eaters
72	The Shimmering Skyscraper
73	The Shimmering Tyrant of Illusion
74	The Shrinking Pit
75	The Silver Citadel
76	The Singing Scholar of the Universe
77	The Singing Wasteland of Fear
78	The Skyscraper of Simak's Rockets
79	The Spectral Island
80	The Star of The World's Hovercar
81	The Strange Forest of Callisto
82	The Sword of The Martian Planets
83	The Tale of the Azure Prism
84	The Tale of the Lightning of Space
85	The Tale of the Stone of Phobos
86	The Tesla Coils of Bok's Scholar
87	The Thief that Abandoned the Women
88	The Timeless Tetrach
89	The Tree of Hamilton's Moto-Men
90	The Tripods of Zeno's Pyramid
91	The Tyrant that Pursued the Cosmos
92	The Vacuum Tube that Ate the Test Tubes
93	The Venomous Tunnels of the Moon
94	The Violet Depths of Fear
95	The Wrong Chasm of the Planets
96	The Yazirians of Overshaw's Vessel
97	Transformed by the Doctor of the Saucers
98	Transformed in the Quivering Hovercar
99	Twilight of the City
100	Oscilloscope from the Chasm

Editor's Note: I love d100 tables, don't you? Consider making one for the next issue.



STAR LAW INTELLIGENCE REPORTS

By StarFrontiers.us Community

ANNUD SCHLEM

Name: Annud Schlem, AKA Arnud Horris, AKA Jilber Trunn, AKA Toothpick
Race: Human
Gender: Male
Homeworld: Clarion

Known Associates: Star Devil Pirate Gang
Base of Operations: Unknown
Last Known Location: Triad, Cassidine

Threat: Known to have stolen and be in possession of Tritium (source; PGC High Security Storage Triad approximately .5 kg Tritium, and 15,000 credits worth traceable electronic credit chits)

Threat Rating: Triad: Low; believed to have left the Planet. Frontier: High

Submitted by: Special Agent Alper Sohon of Star Law.

Submitter Notes: It is believed that the pirate gang will be using the Tritium to build thermonuclear weapons to be sold on the black market. Thermonuclear arms are outlawed for civilians by Frontier treaty. Suspect is Armed and Highly Dangerous. Known to have committed murder of 4 Security Guards and destroyed 2 Security Robots and the theft of 2 more. Also wanted for 3 counts: Rape, 4 counts: Grand Larceny, Unknown Counts: Piracy in High Space, and 1 unpaid parking ticket. Identifying Marks: Red Devil Tattoo on right shoulder. Male Pattern Balding, Moderate Graying of Hair and Facial hair. Long sideburns, goatee possibly shaved to ease escape offworld. Tattoo of Lotus Flower and Dagger on Left forearm.

Annud Schlem

PSA: Military (Unarmed 6, Projectile 4, Beam 4, Melee Weapons 2, Demolitions 3, Computers 4)
 RW 35, M 35, PS 4, IM 5, RS 50, STA 50.
 Automatic Pistol, 3 mags 15 rounds each. Laser Pistol, Frag grenade, Dose grenade, Albedo Screen Skiensuit worn under street clothes. Power Beltpack

Referee Note: This guy shaved off the sideburns and goatee and colored his hair to help his escape offworld. The Tattoo on left arm was washable with soap and water so it is no longer there but it also helped fool police into looking for someone with that tattoo, also helped to ease his escape. Star Law suspects that he changed his appearance but they do not know the left arm tattoo was a fake meant to throw them off. They have him on camera, but he left no known DNA samples for them to trace.

GY FALSAED

Name: Gy Falsaed
Race: Dralasite
Sex: n/a
Homeworld: Cassidine
Known Associates: Black Hand Gang
Base of Operations: Unknown
Last Known Location: Video cam recording, White Light, Base Station

Threat: Supplant high-ranking officials at one or more mega-corps causing potential rifts or securing technology for nefarious purposes.

Threat Rating: Moderate, frontier-wide

Submitted by: Abey Schmidt

Submitter Notes: I have been trailing Gy for six months and based on the trail I've increased his threat to moderate since I believe he is collecting information and material to supplant one of the frontier mega-corps.

Gy Falsaed

PSA: Military (Beam 4, Computers 4, Demolitions 2, Technician 2)
 RW 80, M 60, PS 4, IM 4, RS 40, STA 50.
 Battle Rage 35% (Gy has been injecting an unknown chemical into his body for the past 3 years that allows him to rage much like a yazirian.)

WARREN

Name: Warren
Race: Human
Sex: Male
Homeworld: Minotaur

Known Associates: Vesley Lumbottom
Base of Operations: Hardrain slums near Alpha-Quad
Last Known Location: Hardrain, Minotaur

Threat: Warren is working with the Malthar to supply underground operative's weapons and shielding technology

Threat Rating: Extreme: Minotaur, Low: Frontier

Submitted by: Abey Schmidt

Submitter Notes: Warren is the leader of FreeDOOM, a local group supplying factions with weapons and shields. He has background in the medical field and is a black belt in Coa-Su

Warren

PSA: Biosocial (Unarmed 6, Projectile 2, Beam 1, Computers 2, Psychosocial 4)
 RW 60, M 80, PS 6, IM 5, RS 50, STA 60.

CYBORG SALLY

Name: "Cyborg Sally" (true identity unknown)
Race: Human
Sex: Female
Homeworld: Outer Reach, Dramune

Known Associates: The Malthar, Pirates, Black Moon Marauders
Base of Operations: Lynchpin

Last Known Location: Ares, Moonworld

Threat: Psychopathic Murderer, Terrorist, Pirate

Threat Rating: Lynchpin - HIGH, Frontier - MEDIUM

Submitted by: Agent Harlen Tristov, Star Law

Submitter Notes: Cyborg Sally's true identity remains unknown. She is a cybernetically altered/enhanced human female wanted for acts of piracy and murder in several star systems of the frontier sector. The few eyewitness reports that exist regarding her physical appearance describe the female as being partially robotic (left side of face, left arm, left & right legs). She has long red hair worn in a single braid and has an extremely athletic body type. Cyborg Sally is reportedly "faster than a Vrusk on fire" with regards to her foot speed, and also seems to have several concealed weapons in her left arm, hand, and legs.

Cyborg Sally

PSA: Military (Unarmed: 5, Beam: 5, Projectile: 3, Melee: 4, Demol: 2, Computer: 3, Pilot: 3, Tech: 6) RW: 40, M: 35, PS: 5, IM: 5, RS: 5, STA: 55
Sally's left hand acts as a Shock Glove; her left arm has a concealed Electrostunner; a scratch from her lefthand fingernails inject a lethal toxin; her left eye has infrared vision; her movement is equal to a warbot's maximum speed; her right leg conceals a laser pistol; her left leg conceals an autopistol; the strength (STR) of her left arm is 75.

Cyborg Sally is extremely intelligent, but quite insane. Her only desire is to acquire more cybernetic implants. She is thus attracted to new technologies like a bee is attracted to honey, especially if the new technology will enhance her ability to kill, maim, and plunder. She lead a gang of like-minded cybernetically enhanced individuals known as the **Black Moon Marauders**. Their Corvette class ship is called the **Death Moon Rising**.

COLONEL DESTRA

Name: Colonel Destra

Race: Human

Sex: Female

Homeworld: Unknown

Known Associates: General Yan-Soon Shea-Dow

Base of Operations: Unknown

Last Known Location: Truane's Star

Threat: Under the General's command Destra has led several successful ground raids decimating planetary defensive grids.

Threat Rating: Extreme: frontier-wide

Submitted by: Ruse M.

Submitter Notes: I've witnessed Destra's thirst for combat. Once given orders she will carry them out to the letter with one exception; she has never taken a prisoner to date. Often she is seen among her troops fighting shoulder to shoulder using melee and projectile weapons.

Colonel Destra

PSA: Military (Pilot: 4, Computers 3, Demolitions 5, Melee/Unarmed 4, Projectile 6, Beam 2, Technician 4) RW 85, M 75, PS 5, IM 8, RS 80, STA 70.

Dual auto-pistols, Electric sword, 4x Frag grenade, 4x Smoke grenade, Albedo Screen, Skisuit worn under military clothes. Power backpack attached to screen.

Anywhere but the battle field Destra carries herself like a lady of renown. She has intelligent eyes that often stare through you than on you. Finley dressed she is attractive and deadly, a dire combination.

DR. FINDALGO

Throughout the Frontier and Rim many an adventurous soul has made their fortune through daring deeds which have not always been legal. When these beings begin to see their hair or chitin change color or their elasticity, they begin to give they realize they may not be able to continue their deeds of daring do. Some turn to pharmaceutical means to hold onto their youth. There are many who are more than willing to fulfill this need. Most deal in harmless and not so harmless "snake oils" and are regularly rounded up by local law enforcement. Some are much more effective and dangerous. One such group is Life Immortal. A shadowy organization headed by Doctor Findalgo. Based aboard a Void capable laboratory life-extending serums and other illegal experiments are conducted.

Name: Dr. Findalgo

Race: Dralasite

Sex: n/a

Homeworld: Terledrom, Fromeltar

Known Associates: Captain Walva and his crew of Humans and Dralasites of the LS Forem, Several Pirate Organizations and Criminal Organizations

Base of Operations: Laboratory Ship Forem

Last Known Location: Zik-Kit, Kisk'Kar Threat: Mass Murderer and Slave Trader

Threat Rating: To the Frontier: Low/ To individuals especially Yazirian and Human: High

Submitted by: Councilor Vrrit Klat, Commercial Council of Kraatar.

Submitter Notes: Developed a process to extend the life of Vrusk by using extracts from the Hilktera Gland from Yazirian and Thyroid Gland from Humans. To obtain enough of the needed extracts, its modes operandi is to buy slaves from pirates and slowly drain what it needs until the subject dies. It uses several criminal organizations for distribution of its drugs. It is however not certain whether its formula actually works. Suspect usually armed. Identifying Marks: None
Dr. Findalgo PSA: BiosocialEnvironmental 4, Medic 6, Psycho-Social 2, Computers 4, Technician 1, Beam Weapons 3, Unarmed 1, Robotics 2RW 25, M 25, PS 3, IM 5, RS 50, STA 60.

Laser Pistols, 4x Dose grenade, Albedo Screen, Power Beltack worn as bandolier

Author's Note: Feel free to change any details to better suit your campaign. This villain is best as a rumor behind the scene which must be must be dug out.

VESLEY LUMBOTTOM**Name:** Vesley Lumbottom**Race:** Human**Sex:** Male**Homeworld:** Unknown**Known Associates:** Warren, Malthar**Base of Operations:** Dramune, Outer Reach**Last Known Location:** Hardrain, Minotaur**Threat:** Malthar weapons dealer supplying a number of worlds with illegal and deadly weapons.**Threat Rating:** Extreme: Frontier-wide (shoot on site)**Submitted by:** Tibley McDoog (deceased)**Submitter Notes:** (garbled communication from the late Ranger McDoog) I have appre.... ..thar.... lately supplying Minotaur rebels with high-grade weapons. His local c... arren.**Vesley Lumbottom**

PSA: Military (Demolitions 4, Computers 3, Unarmed 3, Projectile 4, Beam 4, Melee 6)

RW 75, M 65, PS 4, IM 7, RS 70, STA 65.

Automatic Rifle w/ 4 mags, Laser Pistol, 4x Frag grenade, 4x Dose grenade, Albedo Screen, Skisuit worn under military clothes. Power backpack attached to screen and pistol.

Vesley is an expert marksman with heavy weapons and does not take the -10 penalty. He prefers deception over straight combat but will not back out of a fight. Given the choice he would rather lure enemies to follow him dropping grenades behind.

DR. GALCIEN**Name:** Dr. Galcien**Race:** Dralasite**Homeworld:** Inner Reach, Dramune**Known Associates:** Several including the Star Devil Pirate Gang & a militant faction of the Frontier Peace Organization**Base of Operations:** Unknown**Last Known Location:** Zik-Kit, Kisk'Kar**Threat:** Developed an illegal modification to Stimdose that has half the effect but is twice as addictive as anything on the market. Further, it seems to cause a Yazirian like battle rage.**Source:** UPF Military Defense Research Laboratories**Threat Rating:** Laco: Low; believed to have left the Planet. Frontier: High**Submitted by:** Lieutenant Colonel Anthony Desmond Bellefleur III Chief Assistant Research Director UPF Chemical Solutions Research Laboratory.**Submitter Notes:** The good doctor had a difficulty with authority and lost his moral compass. It is believed she is distributing the formula for his substance and other classified secrets for money and a safe place to hide. She is desperate and willing to make a deal with anyone. Suspect is possibly armed. Known to have caused several overdoses during illegal experiments of the new drug. Also wanted for

Distributing Classified Military Material. Identifying Marks: None, currently in the female stage of reproduction.

Dr. Glacien

PSA: Biosocial (Environmental 2, Medic 6, Psychosocial 5, Computers 2, Technician 1, Beam Weapons 3, Unarmed 1, Melee 1)

RW 25, M 25, PS 3, IM 5, RS 50, STA 60.

2x Laser Pistols, 2x Dose grenade, Holo Screen, 2 Power Backpacks worn as bandoliers 4 SEU Clips.

The military cannot decide how much they want to reveal about the doctor as it might attract the wrong element to seek her out for the doctor's information., particularly sathar agents given some of the doctors' work in Xenopsychology.



SO YOU'RE... CARL THE VRUSH? NAMES FOR STAR FRONTIERS ALIENS

By Allen Trussell

When naming a character, whether a PC or NPC, a player seeks to create a memorable moniker to identify said character. While it is certainly the player's choice as to what name to craft, by following certain guidelines and examples, he can add a certain verisimilitude by choosing the "right" name for his character. While "Carl" might be a perfectly acceptable human name, it is less than effective when applied to our eponymous vrush (who might be better named "K'rll"). By creating names that fit into a theme, and naming characters accordingly, any game is lent credibility, atmosphere and continuity.

The various races of the Frontier have each developed their own languages and cultures, and with such their own unique names and naming conventions. On worlds where there is a great deal of racial intermixing, some linguistic borrowing will certainly take place, but most races will retain names that make sense to their cultural and linguistic identity.

DRALASITES

The vocal capabilities of the dralasites are remarkable; a dralasite can make a wide range of sounds that enable them to speak most languages. Nevertheless, the dralasite language contains certain common and frequent sounds, and this carries over into their names. Dralasite names are usually two or three syllables long, and commonly feature the consonants *b*, *d*, *g*, *l*, *m* and *r*, and the vowels *a* and *o*. Many syllables resemble "popping" or "gurgling" sounds, and native dralasite speech is often likened to "bubbling".

Since dralasites reproduce by budding, and often only know a single parent (though typically raised by a community), familial names are largely absent. Dralasites typically have only a single given name.

Gender is likewise not a factor in naming, as dralasites change gender with age.

Some dralasites, through oral tradition, DNA matching and the like seek to keep track of the lineage of important ancestors. In such cases, a dralasite name will consist of a long series of syllables, each generation adding the current dralasite's given name to the forefront of the lineage. Some of these lineages can stretch to 15 syllables.

An asthetic sect (Robagozon – the Chosen of Robag) adds a suffix to their given names – *oc* for males, *ag* for females and *gor* for neuter. Similarly, there are suffix and prefix syllables used in some sects and organizations to denote title, rank and other honorifics.

Some dralasite names go against convention, and purposefully add atypical sounds. Even here, there are certain commonalities. *H*, *p*, *s*, *sh*, *th*, *z* and *zh*, as well as *i*, *e*, and long *i* are often used in such aberrant names. Many such names are constructed to resemble those of other races, and it is among these that some dralasites add a surname, even though they have no other reason for doing so. Very rare are the sounds *k*, *ks*, *t*, *ts*, *ch*, *j*, *v* or *f* used in any dralasite names, although it is not impossible.

Example Dralasite Names: Alboor, Amnoor, Apnarru, Barganoo, Bliboo, Boolpoor, Brodnar, Broonah, Calood, Camoo, Doorrem, Dorguu, Farmood, Floomu, Frobban, Gallood, Ganoo, Glommu, Gorban, Gramu, Hanoo, Klobo, Kloomud, Lamnod, Loobor, Mamnood, Mriboor, Neemu, Nomel, Palbor, Palgoom, Porruu, Ruloom, Thalloo.

Example Honorifics and Titles: Brin, Flar, Grud, Halplar, Har, Lodou, Loo, Modou, Noo, Podou, Rin, Ruu.

VRUSH

The vrusk have mouthpieces and voice boxes unlike any other race in the Frontier. Their speech patterns are filled with buzzes, clicks, whistles and hisses. Most non-vrusk can only approximate these sounds. While speaking vrusk languages is difficult for non-natives, the vrusk themselves face similar obstacles in speaking other languages. Vrusk names are no different; even the most accomplished linguist can have trouble pronouncing vrusk names properly.

Vrusk can easily make the consonantal sounds *f*, *g*, *h*, *k*, *r*, *s*, *t*, *ts*, *th*, *v*, *z* and *zh*, as well as the vowel sounds *a*, *e*, *i*, and *u*. Vrusk also use glottal stops, which is represented by an apostrophe in writing. Vrusk name are multi-syllabic, with most syllables separated by glottal stops. Most vrusk have a single given name and a familial name, each consisting of two or three syllables. The syllables of a familial name usually consist of a clan or company name, along with a family name; familial names typically precede a given name.

Among the vrusk of the Zin'thras'kil district of Ken'zah-Kit there is a naming convention which places in order company name, clan, profession, title or rank, and lastly personal given name, all in one, multi-syllabic name. This is a tradition that is falling into disuse as the vrusk deal with other species.

Very rarely, some vrusk choose a singular name. These are usually monastic, scholarly or other aesthetes, though some artists or entertainers

occasionally embrace such a name. Among aesthetes, this is done to eschew the normal conventions of vrusk society, and is a solemn ritual known as the *vits'kri*, the "husking"; it is considered a rebirth of the vrusk.

Example Male Names: Cer'stas, Che'ras, Ch'lax, Glikitz, Gor'ze, Itektiz, Kax, Kettas, Ki'teh, Ki'tik, Klikitz, K'raz, No'zanz, S'ich, Stikl'z, Ting, Tuzex, Tvil'z, Vik'ka, Vikitz, Vis'hax, V'keem, V'traz, Z'kat, Zlik'ka.

Example Female Names: Cher'zix, Chet, Clixitz, Ixxitz, Klar'st, K'tisiz, M'lat, Mrilat, No'zan, S'kix, Skixitz, Stiz'k, Tikeem, T'rez, Vareezixi, Vasikix, Va'traz, Vexitz, Vikik'y'le, Vri'kat, V'tik, Zixi.

Example Clan and Family Names: Chi'kat, Chint'k, Ch'ting, Ch'ttas, Gleckt, Mallox, Oil, Oiti, Stizix, Triksa, Tuz'kitz, Tvis, Vakeem, Vati, Vax, V'heras, Vraz, Zekaklox.

Example Ranks and Titles: Aq, Ce, Clat, Clig, Clitix, Gst', Kets, Kix, Lat, Mristix, Te, Tu, Vats, Za, Zi.

YAZIRIAN

Yazirian speech is filled with animalistic snarls, hoots, growls and cries. There are numerous yazirian languages and dialects, which allows for a large variety in yazirian names. Heritage and honor are of great importance in almost all yazirian cultures, and this often is reflected in their naming conventions.

The most common consonantal sounds among yazirian speech are *b*, *d*, *g*, *gh*, *h*, *k*, *kh*, *l*, *n*, *ng*, *p*, *r*, *s*, *sh*, *t*, *th* and *z*; the consonant-vowel *y* is surprisingly rare, though not unknown. The vowels *a*, *ee*, *o* and long *u* are common found as well. Most yazirian names are one to three syllables in length, and consist of a single given name, an honorific or title, and a familial surname. Titles and honorifics are typically a single syllable used as a prefix to the surname, or occasionally the surname.

Important ancestors are sometimes honored in yazirian names, usually by adding the ancestor's given name to the bearer's given name in hyphenated form, though occasionally as a second given name. Families of noble lines may have several notable ancestors, and may be accorded a title of significance as a middle name. Descriptives and nicknames are popular among younger yazirians, and rebels seeking to buck tradition. Such names are often diminutives, alliterations or borrowings from other cultures. More mature yazirians usually ignore such appellations, and they fall into disuse with age.

Example Male Names: Aalem, Aradie, Arzalem, Bratchu, Brum, Chaarg, Flinaar, Haardem, Hachi, Hrasem, Ladem, Naarzel, Nou, Pratchu, Reepo, Rhadeep, Rhates, Snaarg, So, Targ, Tay, Tche, Uradze, Yakim/

Example Female Names: Apane, Brani, Chinou, Chitel, Dai, Grandee, Hradze, Kradi, Latche, Mo, Naklee, Parem, Pradze, Praleem, Rheelou, Rhin, Rinou, Uradi, Yazee.

Example Titles and Honorifics: Ap, Be, Hie, Ji, Rhif, Thchi, Ti, Zu.

Example Clan Names: Batzche, Beessou, Bradze, Chaarg, Garalie, Gratchu, Hrandee, Hrteel, Kragg, Latcha, Meessou, Parj, Prandee, Prinou, Theelg, Yatzche.

BORROWED NAMES AND LINGUISTIC SHIFTS

As different races and cultures grow more integrated, languages undergo shifts as new concepts are introduced. This also is evidenced in the names and naming conventions of the subject races. Many beings find certain alien or foreign sounds appealing or intriguing, and will adopt them into their speech. Others may see a need to have names that are more like their neighbors, regardless of other differences. Thus, while our eponymous vrusk may indeed carry the name "Kr'll", it could be this was based on the human name "Carl". Such borrowings are more common on worlds where multiple races mingle with great frequency. ★

BOOK REVIEW

By William Douglass



I have read many Sci-Fi novels in my day. I have read, Star Wars, Star Trek, Warhammer 40000 and many others. But recently I have discovered a new series. I would like to share my newest experience. My son went to work on his great grandparent's farm last summer. His Great uncle is a sci-fi enthusiast. So after my son returned home, his uncle sent him a box full of sci-fi books. My son asked me to check it out but I was busy getting ready for work. He was telling me of someone named Perry Rhodan. I thought this was the author and had never heard of him. Right before I left I looked at the books real quick and realized they were pretty old. There was also a small stack of novellas. He had already compiled a list of what issues were missing from the collection.

I believe on the final count there were 50 books and 20 novellas. I realized that Perry Rhodan was who the book was about and not the author, so I wrote it down and headed to work. When I got a break I went online and researched Perry Rhodan. I have discovered my son was given a generous gift of historical Sci-fi literature.

According to the website www.perry-rhodan.us, Perry Rhodan has been around since 1961. In all my time, with authors such as Heinlein, Asimov, Bova, and the many authors of the other series I read I had never even heard of this character. As I read on I discovered that it began in Germany and is still going strong. With over 3000 novels, it is probably the longest Sci-fi storyline in history. Wikipedia also has a good review of Perry Rhodan.

So far, I have enjoyed reading them. It is campy so far, but cool too. If you need some original new ideas for an adventure or just need a short escape, I recommend finding a copy to read and enjoy. I will warn you though, they are hard to find. If you speak German it may be easier to find copies.



EQUIPMENT

A GOOD ROBOT IS HARD TO FIND

By Gary Cliff – Georgie – BD Cerridwen

PDG Robotics is a fairly new and independent firm based on Pale in the Truane's Star system. They have a collection of robot designers and programmers that are excellent at artificial intelligence concepts. It is becoming well known throughout the frontier as the best of the upper echelon robot manufacturers. Here are a few of their standard products.

① **PDG PERIMETER SECURITY MODEL PS-7(R)****Base Cost:** 23,691**Level:** 5**Body Type:** Heavy Duty**Limbs:** Two tentacle manipulator arms**Movement Type:** Rotor (Jet-copter)**Special Programs:**

- Computer Link
- Attack/Defense
- Security Lock

Standard Miscellaneous Equipment:

- Anti-Shock Implant
- Chrono-com
- Compass
- IR Goggles (FLIR)
- Magnigoggles
- Radiophone
- Grenade Rifle (auto-loading, twin ammo hoppers)

Description:

This flying robot is specialized for perimeter security. With its rotatory wing flying capability and its nose turret mounted advanced imaging sensors; it will fly patrol routes over a large area. Level 5 artificial intelligence gives it the ability to randomize the routes to increase unpredictability. The Computer Link allows it to communicate with the base computer and assist in the positive identification of targets.

The PS-7(r)'s standard weapon is an auto-loading, belly turret mounted grenade rifle that is fed from two ammunition hoppers, each with a capacity of 10 grenades. This allows the robot to select between two different types of ammunition and the auto-loading gives it a rate of fire of once per turn. The 'bot is capable of identifying and loading its own ammunition using two standard manipulator arms. A secondary

weapon of rifle size or smaller may be added to the sensor turret along with an independent power belt-pack or 5 clips of ammunition. For extreme cases, a pair of rocket launcher rails may also be added to the PS-7(r). There is also a compartment designed to accept standard defense screens and power packs. These customizations will add to the final cost of the robot.

This robot is built on a heavy duty chassis for survivability, but also to act as a transport. It has two external jump seats each capable of carrying a person or robot (anthropomorphic or standard body). This gives the PS-7(r) a secondary mission of search and rescue. It can use its arms to pick up a disabled passenger and strap it securely into a jump seat for evacuation. Many persons wounded during Laco's War owe their lives to the PS-7(r).

The inspiration for the following robot can be viewed at <http://gizmodo.com/5552281/flying-drone-making-the-craziest-maneuvers>.

① **PDG PERIMETER SECURITY MODEL PS-2(H)****Base Cost:** 10,261**Level:** 2**Body Type:** Standard**Limbs:** Landing claws**Movement Type:** Rotor (Jetcopter)**Special Programs:**

- None

Standard Miscellaneous Equipment:

- Compass
- IR Goggles (FLIR)
- Holo-Screen with Camouflage Feedback Loop
- Magnigoggles

Description:

This robot is small (about 45cm across), nimble, and a capable surveillance machine. The 'bot's quad-rotor layout allows it to zip about in any direction, slip sideways through tight fits (doorways, trees, rocks, etc.), and sound like a swarm of angry wasps. This arrangement, along with its small size, gives it double the rate of acceleration (200 m/turn), turns (12), and climb (+/- 40 m/turn) of typical rotor driven robots. The downside is that it has roughly 1/3 of the range (350km). It has four small landing claws that can grip many types of surfaces, allowing it to perch like a spider to a wall.



Its purpose to extend the range of installation security, being controlled by the IS computer program, to spot and trail dangers while reporting back to the home system. It can use its various sensors to find intruders from beyond weapons range. Should it get too close to danger, it can activate a camouflage enabled holo-screen to safely hide while it quickly retreats. It draws power for the screen from its specially built compact parabattery, so screen time is limited. Nonetheless, this little 'droid is a favorite of remote outposts, police, and paramilitary types throughout the frontier.

HARM YOU DON'T WANT TO BE IN ITS WAY

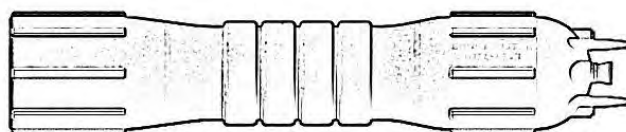
By Thomas Verreault/ jedion357

HARM stands for **Hyper-velocity Anti-ship Reaction drive Missile**. It comes in two varieties; HARM (AR) and HARM (RB). Each variety of HARM is designed to be a reload for existing assault rockets and rocket battery launchers. Originally developed in the Rim as an anti-fighter weapon it has proven its worth against larger vessels as well.

The core of the HARM warhead is a payload that deploys multiple magnetic charges that scatter over an area of the target's hull several tens of meters wide. Each charge is in essence a shaped breaching charge. On board sensors in the payload align the charges before impact and seconds after impact all charges blow in unison. The result is often catastrophic damage to the targets hull.

Game Mechanics: Both of the HARM's function exactly as the normal load out for the launchers they are mounted on in all respects except damage. The Damage Table Modifier (DTM) for the HARM (AR) is -20 (instead of -10) and for the HARM (RB) the DTM is -30 (instead of -20). The damage output remains the same for each weapon; 2d10+4 for the HARM (AR) and 2d10 for the HARM (RB). However, when targeted on a HS 2 or smaller vessel all damage is automatically applied against Hull Points. Very few Hull Size 1 fighters will survive a typical hit from either of these weapons making them a one hit - one kill vs. small fighters.

Because the ordinance has greater technical sophistication then the standard load out for the assault rocket and the rocket battery it is more expensive. A HARM (AR) costs 15,000 and HARM (RB) costs 7,500.



HARM

	DTM	Damage	Cost (CR)
HARM (AR)	-20	2d10+4	15,000
HARM (RB)	-30	2d10	7,500

* DTM - Damage Table Modifier

Author's Note: Game mechanics are tied to the advanced Knight Hawks rules specifically, if the basic game rules are in use then rule a hit from HARM ordinance against a HS 1 fighter as an automatic kill.



233 - TRB TRAUMA RECOVERY BOT

By Chris Harper

Trauma Recovery Bot

Level	2
Mass	10kg
Type	Emergency medical
Body Type	Standard
Battery	50 SEU pack
Move Mode	Crawl
Move rate	120 meters/turn
Limbs	3 retractable legs, 1 extendable grabber
IM / RS	8 / 80
Stamina	70
Attack	None
Damage	None
Programs	Monitor vitals, Search, Stabilize Injured, Recover Injured
Equipment	Computer, 50 SEU battery, Biocort (10 doses), Staydose (10doses), Hypo, Infrared Camera System.

* Attacks against the bot while it is moving are at a -25%, before any other modifiers, due to its high speed and small size.

The TRB is a small robot designed to rescue wounded beings in hostile situations. TRB's have been used by UPF Landfleet to save soldiers during combat. It has also seen use in the scout service and with planetary exploration teams. The robot consists of a main pod and three articulated legs. The main pod houses the computer, SEU pack, infrared sensors, Biocort and Staydose hypos and an articulated pincher. The legs can fold up inside the pod. When folded up the robot can be carried with the handle or as a backpack with the retractable shoulder straps.

The TRB can get to spots where a man sized person cannot. The spider-like robot is designed to be agile and fast. Its purpose is to keep living beings out of harm's way. The TRB monitors vitals on

up to 8 team members. A programmer must add the members to the 'bots program. The TRB will then respond to voice commands and knows each team member by name. The TRB will also heal non-party members if given a verbal command.

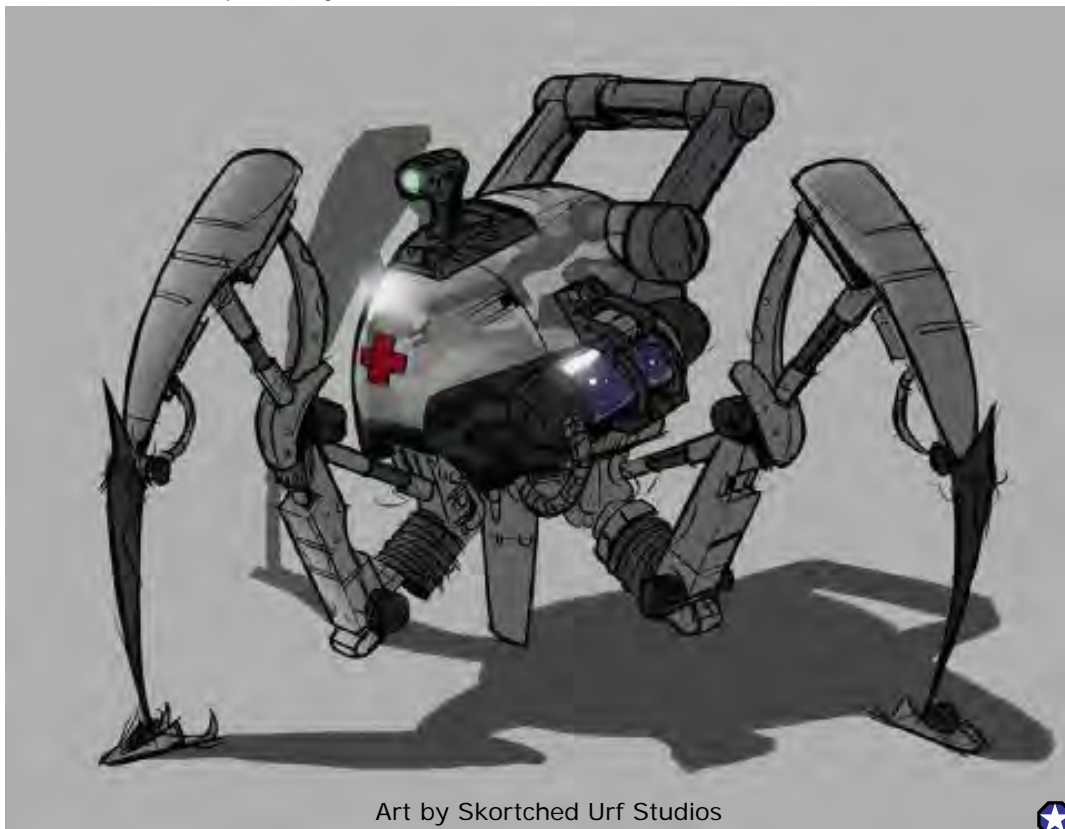
The TRB can remain folded up in a backpack. With a voice command the TRB will hop down and follow the party or carry out a command.

With a voice command the TRB will administer Biocort (see AD for rules) to a character. If the TRB senses that a character's STA has dropped to zero or below it will immediately scuttle to the character and administer Staydose (see AD for rules). If a wounded team member is in a location that the TRB perceives as dangerous it will affect a rescue.

The TRB can search ruins, crash sites or disaster areas for survivors. It is able to lead or drag victims and survivors to safety.

The autonomous TRB will respond to simple verbal commands, but does not have the ability to verbally respond. Due to their ability to operate independently many TRBs have been known to develop crude communication styles based on appendage gestures, pod shaking, nodding etc. They also seem to like nicknames.

The TRB's are programmed for danger and the saving of sentient beings. The TRB's secondary mission is to preserve itself. If a command is given that does not directly help a wounded being and risks the TRB it will refuse the command.



THE D.S. PISTOL

ByTelpahak

D.S (Deep Sleep) Pistol

Type	Beam Weapon
Cost	800 CR
Weight	1kg
Damage	5d10
Ammo	Fuel Cell (75 CR/6 shots)
ROF	2
Range	5/10/25/-/-
Defense	Albedo Screen/Skinsuit *
Skill	Beam

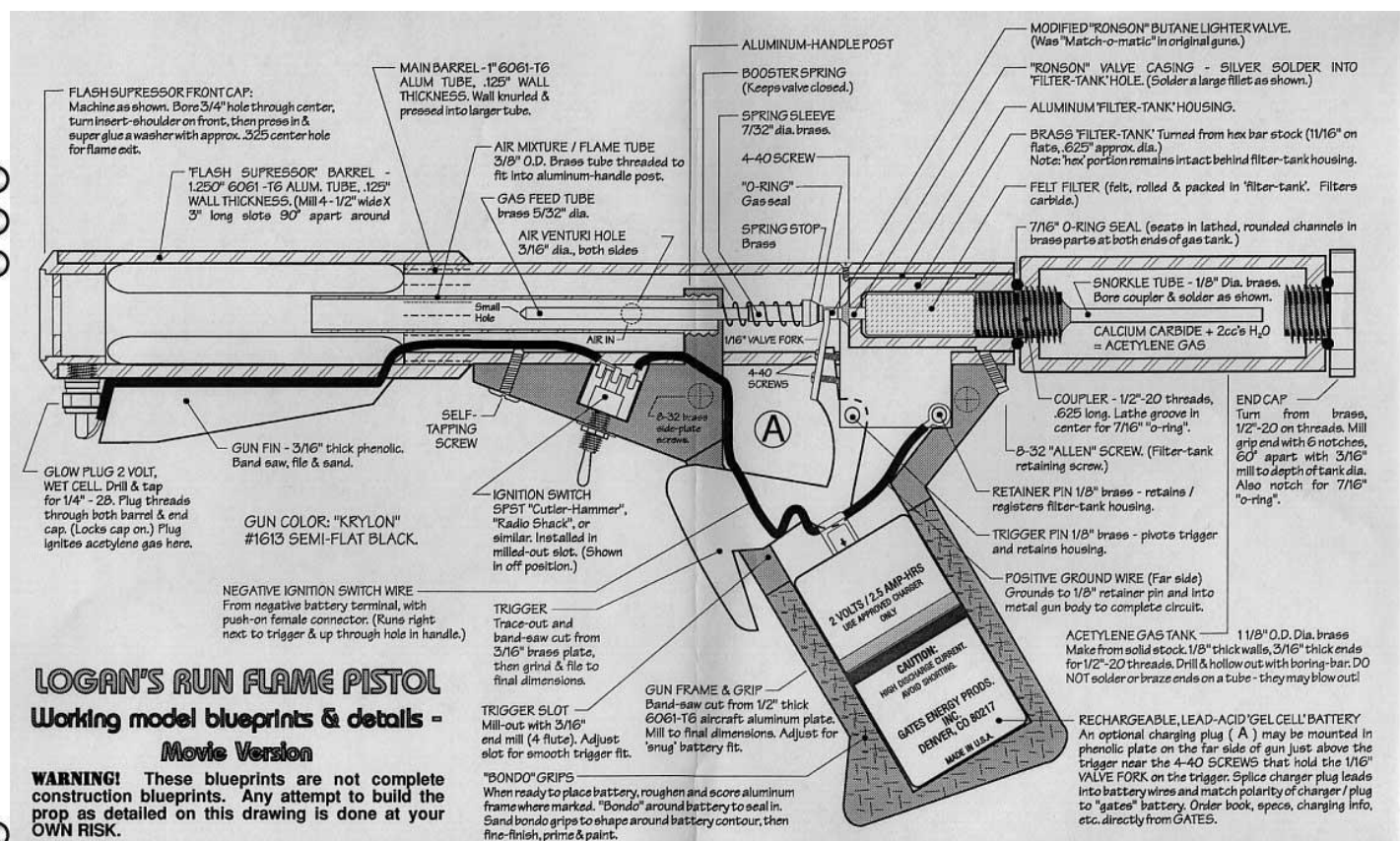
* Albedo Screen absorb damage as normal, Albedo Suits do not.

Author's Note: Inspired by the movie, "Logan's Run", I present the D.S. Pistol (Deep Sleep).

This weapon is simple, but very effective. The DS Pistol employs an ignited gas charge to produce a short-range plasma bolt that inflicts damage on the target. The actual bolt is invisible to the naked eye, but produces a very large flame at the end of the barrel. (The bolt can easily be seen with IR Goggles)

The sound, when fired, is much like a "WOOF" of contained fuel being lit, and the pressure coming out of a small opening. The blast has a shorter range, as it cools quickly and loses effectiveness past a medium range.

The ammo for this gun is a form of Acetylene gas enriched with a small, gaseous bit of Cesium. The acetylene blends with the cesium and enters the compression cylinder and is ignited. The acetylene forces the cesium into a plasma state, and the pressure build-up forces the shot down the barrel causing the signature "four leaf clover" flash at the end of the barrel. The excited plasma flies down range, inflicting nasty burns to the target on a successful hit.



LOGAN'S RUN FLAME PISTOL

Working model blueprints & details -
Movie Version

WARNING! These blueprints are not complete construction blueprints. Any attempt to build the prop as detailed on this drawing is done at your OWN RISK.

NEW WHIPS

By Larry Moore

With an 8 cm handle and 3 meters of synthetic leather a whip in the proper hands can be pain inflicting. In the hands of a dexterous character, they can be the difference between life and death. Whips are primarily used in animal training as a motivation tool.

Adventurous characters find whips helpful in latching onto obstacles and pulling themselves safely, grabbing an object from a distance or relieving a guard of his weapon (Referees should allow such adventurous actions with DEX checks, though a penalty of -10 should be imposed to this on top of any other modifiers the Referee believes necessary; it is not an easy skill to master).

HIGH QUALITY WHIP

Due to its superior workmanship this whip grants a +5 to hit. These whips are usually found in rural areas of the frontier and can be purchased locally for 100Cr. Mail orders cost between 500 to 1,000 credits and take 45 days to ship.

Whip (high quality)

Cost	100 CR
Weight	0.5kg
Damage	1d10
Defense	Interia
Skill	Melee (+5)

ELECTRIC WHIP

This type of whip has a slot to fit a single 20 SEU clip inside the insulated handle. The whips strap is weaved with synthcoil, a conductive material. When activated a deadly current travels down the length of the whip. The whip must be coiled around the target and causes 1d10 gauss damage and drains 1 SEU. Nefarious characters remove the limitation allowing the whip to release 5 SEU's at one time causing 5d10 per SEU gauss damage and drain 5 SEU.

Electric Whip

Cost	225 Cr
Weight	1.0kg
Damage	1d10 gauss*
Ammo	20 SEU clip
Defense	Gauss
Skill	Melee (+5)

* Star Law is experimenting with a version that delivers a non-lethal stun effect. For each SEU used subtract 5 from the targets current STA avoidance roll.

** Can be used as a normal whip.

SONIC WHIP

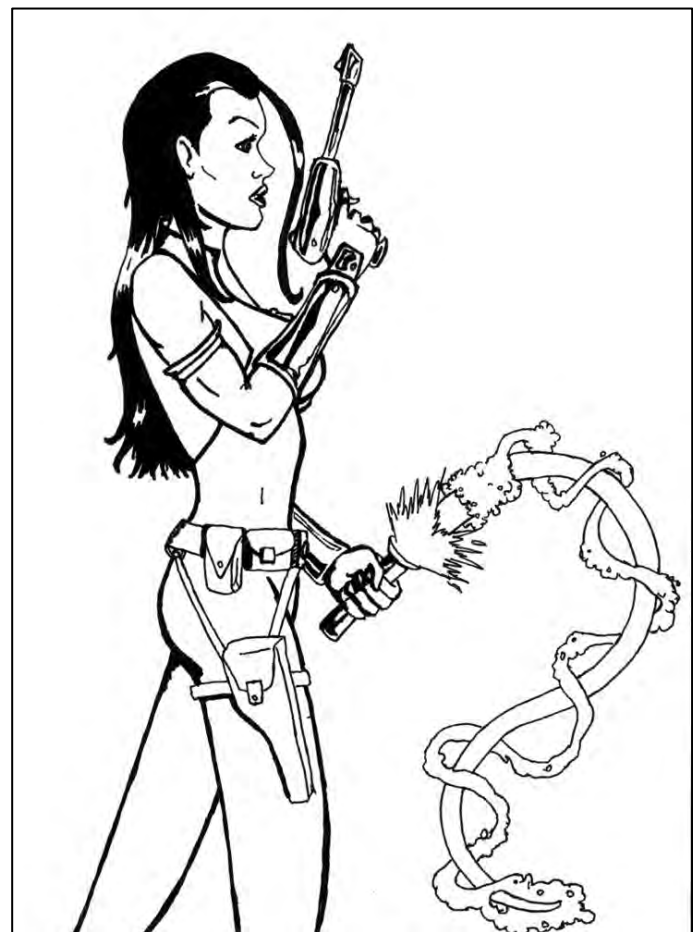
A special whip indeed, the tip of the whip has a sonic crystal that resonates when it reaches high-velocity. This causes a sonic disruption along a trajectory; anyone caught in the path takes damage. When a character fails his roll to hit; use the grenade bounce table to determine the direction of the sonic disruption. Watch out, it could hit the attacker!

Sonic Whip

Cost	575 Cr
Weight	1.0kg
Damage	1d10 sonic per charge
Ammo	1d10 charges, 2 chargers per use
Defense	Sonic
Skill	Melee

* Sonic crystals of this nature are rare. When determining how many charges a crystal has roll 1d10. On a roll of 01-2 the crystal will not function. The sonic damage is equal to the number of charges; for instance a crystal with 5 charges will cause 5d10 sonic damage and use 2 charges. When used again it has 3 charges remaining.

** Can be used as a normal whip.



Artwork by newmutant
<http://newmutant.deviantart.com>



NEW COMPUTERS

By Victor Gil de Rubio

Here's some new equipment that I thought would work well in the Frontier, and if added to the stuff already written about Cybernetics opens the possibility for a cyberpunk style game using the Alpha Dawn rules.

Editor's Note: This article makes mention of the bodycomp and progitis from Zebulon's Guide to Frontier Space which can be download from <http://starfrontiersman.com>

SPECIALIZED COMPUTERS

Computers have become such a part of everyday life that they affect every aspect of life in the Frontier. The following are new computers that have been developed for use in the Frontier. They include macro-computers that are in simplest terms super mainframe computers, capable of running and storing greater amounts of data, or programs than the standard mainframe computer.

Computer gauntlets have taken bodycomp technology and shrunk it down as far as it can possibly go. The most recently introduced computer interface system to be created for the Frontier is the Virtual Net helmet. This helmet has allowed beings from hundreds of worlds to interact in a completely virtual world. Of course soon after it was created a group of computer experts have appeared that utilize the V-net to access and steal computer information from unsecure computers which has given rise to specialized viruses and defensive systems being created to protect, and often to fry a hacker's VN Helmet and rumors have it that in some cases specialized viruses can affect the mind of the hacker as well.

MACRO-COMPUTERS

As was stated before, macro-computers are capable of holding much more data than a standard mainframe, and can run many more programs than a standard computer. These computers are so expensive that usually only corporations, military installations, and spacecraft can be fitted with these types of computers.

It should be noted that Starplay Enterprises developed a program for their macro-computer called the Virtual Net program, which originally was designed to take the home virtual entertainment system, and take it to its most logical next step, creating a virtual landscape that allowed multiple users from throughout the Frontier to interact using a virtual persona. The complexity of this program could only be run by a macro-computer's processor but the programs required for the creation of a Virtual persona is not so complex so any character with a computer can plug in a specialized program that comes in a universal interface unit, and send his/her virtual persona into the VN world (notes regarding the Virtual Net follow the section on specialized equipment).

The following information details the types of macro-computers available in the Frontier:

Macro Computer Type	Function Points	Generator	Cost (CR)
1	600	64	10,000
2	650	70	15,000
3	700	80	20,000
4	750	100	30,000
5	800	150	50,000
6	1000	200	100,000

* Macro-Computers SEU drainage each hour.

COMPUTER GAUNTLET

Computer gauntlets have taken the frontier by storm, because they provide the power of a bodycomp in the smallest form possible, that of a computerized gauntlet. This device appears as a forearm mounted keyboard and flat screen, and includes an internal reprogrammable Johnson's field making plug in progitis a thing of the past. It has a universal data jack (for interfacing with mainframe computers or plugging into the V-Net, and a touch pad for one finger interfacing of the gauntlet's stored programs

Computer Gauntlets have a progit adapter slot so that a progit can be plugged in, but after it is plugged in the computer absorbs the progit's program, rendering the progit useless, and adds the program to its memory. Computer gauntlets can only store a limited number of progitis, and a progit program must be erased from its system (a purging that takes 10 minutes/progit level) to make room for newer progitis. What makes the gauntlet more attractive though is that it can store and utilize mainframe programs as well, which is why these devices are outlawed by certain corporations who fear employee theft of valuable data stored on their computers.

Gauntlet	Progit	Max Level	Max Capacity	Usage	Cost (CR)
Type A	A	1	4	1	10,000
Type B	A+B	2	8	2	15,000
Type C	A+B+C	3	12	4	25,000
Type D	All	4	16	8	50,000

Usage: Maximum programs in use at one time.
Power: Computer gauntlets come with connectors for belt packs and back and use 5 SEU per type per hour.

VIRTUAL NET HELMET AND THE VIRTUAL WORLD

Star Industries created a level six maxi-prog that requires the processing power of at least a level six computer (Cost of Program 30,000cr) that creates a virtual world. The program can be interfaced by a character either wearing a VN helmet or using a specialized persona program which is stored in a credit card sized interface chip which can be inserted into any mainframe computer, bodycomp, or computer gauntlet. The basic level one program creates a virtual persona

which allows the character to interact with others in the virtual world. More advanced versions of this program grant the character additional options that he/she can do while in the virtual world.

Virtual Net Helmet: A typical virtual net (VN) helmet allows the wearer to access the virtual world without needing a computer. The helmet weighs 1.2 kg and includes a liquid crystal visor, which translates the virtual net's computer code into a visual medium. The unit has a complex brain scanner which allows the wearer to access his/her skills in the virtual world. A VN helmet costs 5,000cr + the level of the virtual persona program and includes a connector for a standard power pack. The helmet uses 2 SEU/hour. The unit also has a power adaptor allowing the user to plug into any power outlet and extend his/her time in the v-net.

The V-Net Persona Program: The virtual world can appear as any environment that the Referee can think of and in fact different zones exist in the V-net created by V-net programmers. Each person using the Vnet however creates a Virtual persona. This persona can look like anything the player specifies but its stats depend on the level of the character's persona program. Below are listed the different persona programs available and their virtual stats:

Level	Stats	Bonus	Damage	STA	Cost (CR)
1	30	+0	1-2	30	1,000
2	40	+5	2-5	40	1,500
3	50	+10	1-10	50	3,000
4	60	+15	1-10+5	60	6,000
5	65	+20	2-20	70	12,000
6	70	+25	3-30	80	24,000

THE VIRTUAL PERSONA DEFINED

Stats: his score represents all the character's physical stats while in the virtual world. A character can perform any physical action including combat in the virtual world that he/she could in the real world by rolling any attribute check using the virtual program's attribute rating + any bonus due to the program's level.

Skill Rolls: A character can use any skills that he/she possesses in the real world, but modifies his/her skill rolls by a bonus determined by the virtual program's level.

Combat Roll: A character in the virtual world can make one attack in a round using a virtual weapon of his/her creation (it really doesn't matter what the weapon is as all ranges in the virtual world is line of sight).

Damage: A successful attack by a virtual persona causes damage based on its persona level. This damage is not modified by the persona's stats in any way.

STA: (Stamina) A virtual persona's Stamina points represent the viability of the virtual persona. When a virtual persona's Stamina points reach 0 the virtual

program crashes out shunting the character back to the real world. A character must then reboot his/her system (taking 10 minutes/persona level) to reenter the virtual world (returning at full health. A character killed virtually by a level three or greater virtual persona must make an Intuition check or suffer a temporary loss of Intuition and Logic equal to 5 points times the program's level. This temporary loss is restored at a rate of 5 points/hour of rest.

A level 5 program (viruses, security maxi-prog) will destroy a character's virtual persona program if they kill the virtual persona. While a level six program not only destroys the virtual program, but will destroy the computer that was used by the character as well which is why some hackers like to hack into public or private systems that do not belong to them to enter the virtual world.

VIRTUAL THREATS

Aside from threats in the virtual world from other people's virtual personas, characters trying to hack into other computers using the virtual world will face virtual personas based on the security programs installed on the computer. These virtual personas are equal in level to the maxiprogram's level. In addition certain hackers have released viruses in the virtual world that, like security maxiprograms, have virtual personas equal to their program level.

VIRTUAL ADDICTION

Characters who spend too much time in the virtual world must make a Logic check with a penalty of -5/24 hour period spent in the virtual world and if they fail this they become addicted to the virtual world. An addicted character who is not plugged in suffers a -5 to all skill checks, attributes, and combat rolls as he/she is distracted and must make a Logic check at +5/12 hour period disconnected and must score three consecutive rolls to be cured of his/her addiction. If he/she fails a roll the character's penalties double and he/she suffers a loss of 5 Stamina points as he/she becomes physically ill. If he/she fails 2 rolls in succession his/her penalties double again and he/she loses 5 additional Stamina points and 5 logic point as well. A character in this state will become violent towards anyone keeping him/her from plugging in.

The character cannot regain any lost attribute points until he/she either gets his/her fix, or succeeds in his/her attempt to overcome his/her addiction. If either of these conditions is met, the character's penalties are immediately erased, and his/her attributes losses are restored at a rate of 1 point/hour.

ORGANIC COMPUTERS

Cyber-technologies Corporation created the first organic computers and revolutionized the industry by creating a computer that could be surgically installed in a recipient. Organic computers are exactly like bodycomps in capabilities, but come with a temple mounted slot with an extendable fiber optic cable that can be connected to a wrist display unit, a mainframe computer, or bodycomp. Organic computers are powered by a micro-power generator much like the one

used by a cybernetic life support system (requiring 6 hours/24 hours of shut down time to recharge).

These generators have a hundred year life, before they need replacing. Organic computers have the following stats:

Processor	Progit	Level	Cost (CR)
Type A	A	1	10,000
Type B	A+B	2	15,000
Type C	A+B+C	3	25,000
Type D	All	4	50,000

INSTALLING PROGITS

Organic computers can have progits imbedded into their processor when first purchased, or the character can upload them from bodycomps by interfacing his/her organic computer to the bodycomp processor. A Progit level (A-D) is equal to 1-4 progit levels (A=1 level). Unlike bodycomps organic computers cannot easily switch progits. The character must first erase the number of levels of progits in his/her organic computer (1 progit level can be erased/round) in order to make room for a new progit and then he/she must succeed on a Computer skill check to interface with the bodycomp and begin uploading the software, which takes 30 minutes/progit level. Imbedded progits however cannot be replaced in this way.

PROCESSOR BOOSTER PACK

A character can spend 10,000cr to buy a processor booster pack. The booster is a scalp mounted unit that connects to the processor through the data port. The unit is charged by the organic computer's power cell adding 2 hours to the recharge rate but it increases the number of progits that the organic computer can hold by 4 levels. These progits can be plugged directly into the headband unit and are protected by a duraplas case.

Art by 3yp (<http://3yp.blogspot.com/>)



FRONTIER CREATURES

KAR'TIX XAG-XIN'S FIELD GUIDE TO FRONTIER CREATURES, VOLUME II

By Allen Trussell

In 100 FY, the UPF commissioned a reference work detailing known creatures of the Frontier. Led by Dr. Kar'tix Xag-Xin of the Vrusk Institute of Xenotics on Kawdl-Kit, this encyclopedia has compiled data of all known flora and fauna, natural and engineered, found throughout the Frontier. Presented here is an excerpt from that collection.

Aore

Type	Tiny carnivore
Number	1 swarm
Move	Very Fast (120 meters/turn)
IM/RS	8/80
Stamina	5
Attack	50
Damage	1d5 bite
Special Attack	Implant eggs (1d10 eggs, hatch 1d5 turns; 1 damage per egg until removed or nullified. Victim dies in 20 hours)
Special Defense	Swarm (each 10 damage equals 1 STA)
Native World	Rupert's Hole; all climates

Description: The aore is a tiny black flying insect. Singly it is nothing more than an annoyance. What makes it dangerous is the fact that one never encounters a single aore, but rather a massive swarm of hundreds of aore. These swarms are attracted to any warm blooded creature. The swarm will cover an area up to 4 meters (two squares), attacking everything within. Because individual aore within the swarm



number in the hundreds, damage to a single aore does nothing to the swarm; only areas-of-effect weapons will affect the swarm. The aore both feed upon and lay eggs within their prey. The larvae hatch rapidly, and mature into full adult aore in 20 hours.

Editor's Note: In all likelihood some weapons will be totally ineffective without an explosive component. Flame throwers, tangle grenades, properly thrown fragmentation grenades may be more effective. Flame thrower gauntlets are popular items with outfitters on Rupert's Hole.

Chithry

Type	Medium carnivore
Number	1-3
Move	Medium (60 meters/turn)
IM/RS	7/65
Stamina	65
Attack	80
Damage	1d10 claws (x2), 1d10 bite
Special Attack	Rend (2d10; when succeeding in both claw attacks, the chithry can use this attack)
Special Defense	Tough Hide (acts as a skinsuit but does not ablate)
Native World	Hentz; plains and scrublands.



Description: This insectoid horror is up to 2 meters in length, and almost as tall. Its hard carapace is covered in mottled dark and light shapes, affording it camouflage in its surroundings. Though insect-like, there is no noticeable segmentation of the body; rather, a chithry seems to be a maw attached to an armored abdomen surrounded by eight legs. The chithry uses its two foremost legs to fight and grasp prey, much in the manner of a praying mantis, and these powerful arms can tear soft creatures apart. The chithry prefers to ambush prey, but is capable of chasing down a juicy meal.

Eelax

Type	Large omnivore
Number	1-5
Move	Fast (90 meters/turn)
IM/RS	5/50
Stamina	130
Attack	40
Damage	Stomp 1d10
Special Attack	Trample (2d10 damage)
Special Defense	None
Native World	Kawdl-kit; plains, scrublands and marshes.

Description: These herd animals are 2.5 meters in length, and stand up to 4 meters tall. A barrel-chested body sits atop six long, stilt-like legs, and the slender head depends from a long, maned neck. The short, hairy coat of the eelax ranges from a chestnut brown to a pale yellow-white. The most remarkable feature of these creatures is their hooves – a single, sharp talon, which easily slides in and out of most terrain.

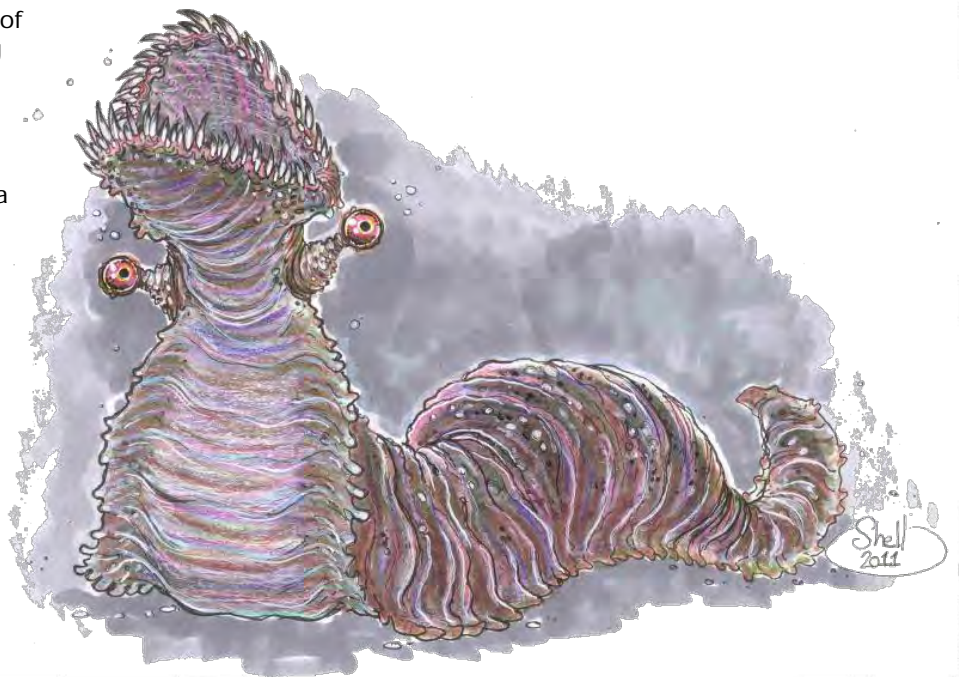
These creatures eat a vast quantity of grasses, leaves, fruits and small animals and insects, from wherever their heads can reach (up to 1.5 meters from the body). While not hostile, the eelax is a fierce defender of the herd, and will fight if necessary. An eelax tries to trample its prey, but can stomp with a single hoof. Eelax flesh is said to be distasteful to those who have tried it, though it is edible.



Gorlan's Hunter

Type	Small carnivore
Number	1-3
Move	Slow (40 meters/turn)
IM/RS	6/55
Stamina	20
Attack	60
Damage	1D10 bite
Special Attack	None
Special Defense	Camouflage (difficult to spot; a successful INT-20 will discern the hunter for what it is)
Native World	Rupert's Hole; lakes, rivers and swamps.

Description: This small, slimy bundle of muscle looks like a purple-brown slug (up to 80 centimeters long) in its natural state. It can alter its color, however, to any hue and even create intricate patterns. An aquatic hunter, Gorlan's hunter (named after a dralasite xenobiologist) can appear as a rock, a clump of algae, a dead fish, or any of a number of objects or creatures typically found in the waters of Rupert's Hole, until it attacks or is attacked. It has a nasty bite, but generally avoids fighting any creature too tough for it. Gorlan's hunter isn't above taking a bite and swimming away.





Grolm

Type	Large herbivore
Number	1-5
Move	Medium (50 meters/turn)
IM/RS	5/45
Stamina	140
Attack	65
Damage	2d10 Slap (x2); 1d10 bite
Special Attack	Rage (25% chance each turn during combat, gain +20 attack, lasts until death or end of combat)
Special Defense	Tough Hide (acts as a skinsuit but does not ablate)
Native World	Laco; forests.

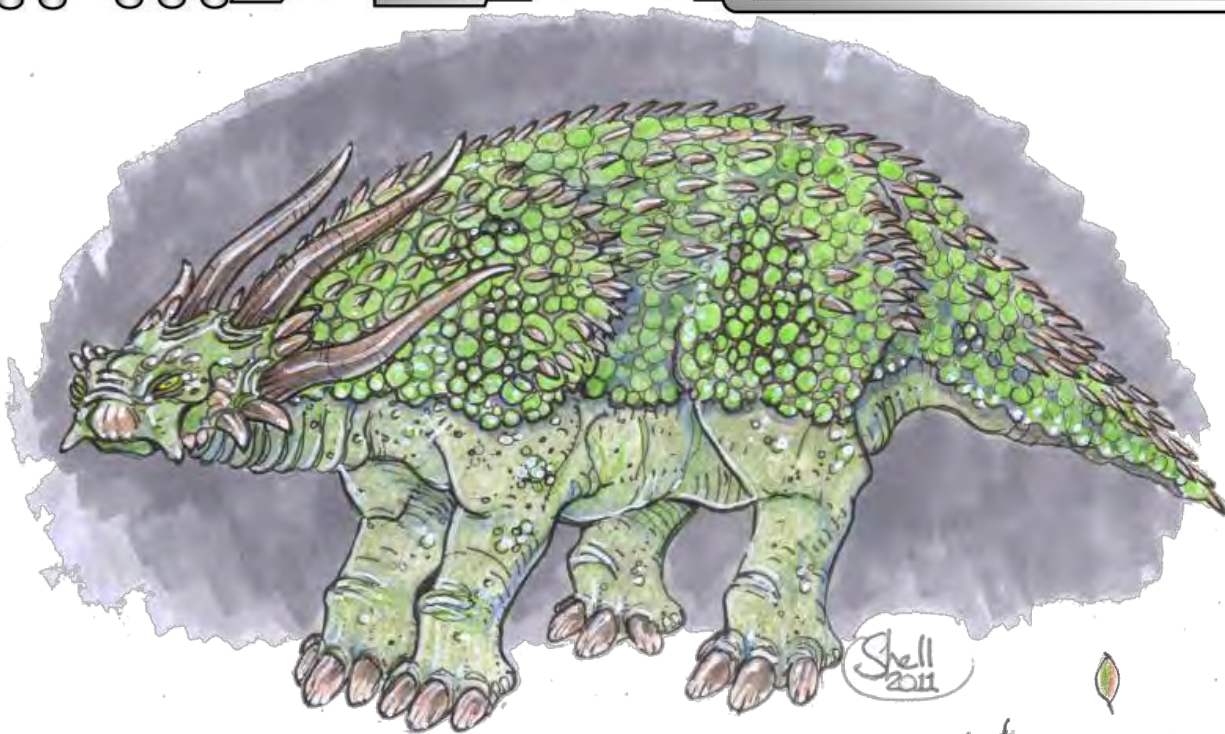
Description: A grolm is a huge, barrel-chested quadrupedal saurian. It normally walks on all fours, but can rear-up on its hind legs, using its strong tail to balance. At over 5 meters long, this creature uses its bulk to intimidate predators and other foes, though it will attack if sufficiently threatened or to defend young. Though a strict vegetarian, the grolm possess sharp canine teeth, and can deliver a savage bite. The tough, scaly hide of the grolm is a deep mottled green, paler on its underside, and often dappled with lighter stripes to break up its profile in the forest.

Ikochi

Type	Medium carnivore
Number	1
Move	Medium (75 meters/turn), Jump 12meters
IM/RS	6/60
Stamina	90
Attack	80
Damage	2d10 bite
Special Attack	Poison bite (S10/T8)
Special Defense	Confusing Display (the feathers and patterns of the ikochi's hide can confuse creatures as to exactly where its head is. A confused creature is surprised; a INT check against a score of 50 is needed to overcome this confusion)
Native World	Hakosoar; plains and scrublands.



Description: This flightless creature is similar to both a bird and a saurian, and is likely a middle stage between the two. Its compact body is covered in short, downy iridescent blue feathers. A brilliant display of long white, blue and red feathers ring both its head and tail, and the ikochi can create a display with these feathers that can confuse prey, allowing for an unexpected attack. The large yellow beak of the ikochi is filled with sharp teeth, and two fangs deliver a strong poison. Its powerful pinkish legs allow the ikochi to run at high speeds, and jump great distances.



Lemmaru

Type	Giant herbivore
Number	1
Move	Very slow (15 meters/turn)
IM/RS	4/35
Stamina	300
Attack	50
Damage	4d10 gore
Special Attack	Trample (6d10 damage)
Special Defense	None
Native World	Ken'zah-kit; plains.

Description: A great, lumbering reptile, the lemmaru can grow up to 15 meters in length and up to 9 meters tall. Its gray-green skin is pebbled with horny growths, and it slowly walks on its four massive, trunk-like legs. A block-like head with four or more sharp horns (which can grow to three meters long) rest low on its body. The lemmaru is not an aggressive creature, but it will fight if threatened, either trampling or goring its attacker. If caught very young, the lemmaru can be semi-domesticated, and makes a powerful beast of burden, though the immense quantity of food needed for it often makes this impractical.

Rik'ta

Type	Medium omnivore
Number	1-4
Move	Slow (30 meters/turn)
IM/RS	5/50
Stamina	80
Attack	50
Damage	1d10 claw
Special Attack	Throw (can hurl any creature its size or less 2d10 meters with damage as a fall; successful STR check against a score of 80 avoids being thrown)
Special Defense	None
Native World	Ken'zah-kit; forests.

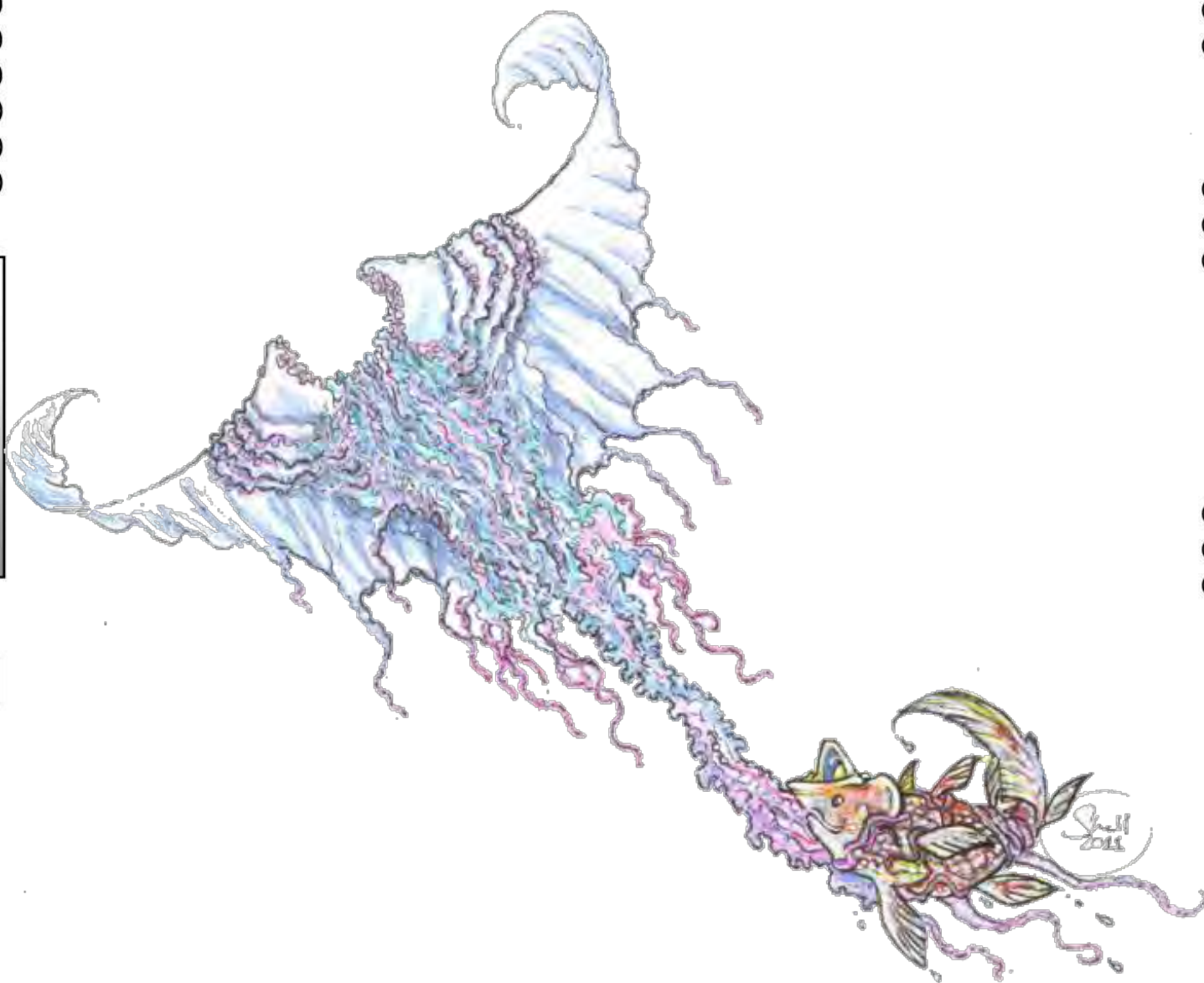


Description: The rik'ta lives high in the trees of Ken'zah-kit, where its shaggy fur blends with the bark of the tzik'tk trees. Rik'ta are bipedal mammals, and eat leaves, fruits, twigs, insects and small animals; basically, anything small and within reach of their long limbs. While rik'ta are not overly aggressive, they will hunt small prey, and will fight to defend themselves and their young. Their favored tactic is to throw enemies as far as they can, usually down to the ground, and then make their escape.

Vik't-ziir

Type	Medium carnivore
Number	1-5
Move	Slow (20 meters/turn)
IM/RS	5/50
Stamina	75
Attack	70
Damage	1d10
Special Attack	Sting (acts like stundose)
Special Defense	Transparency (very hard to see; INT check against a score of 70 to notice)
Native World	Triad; Lake Vast.

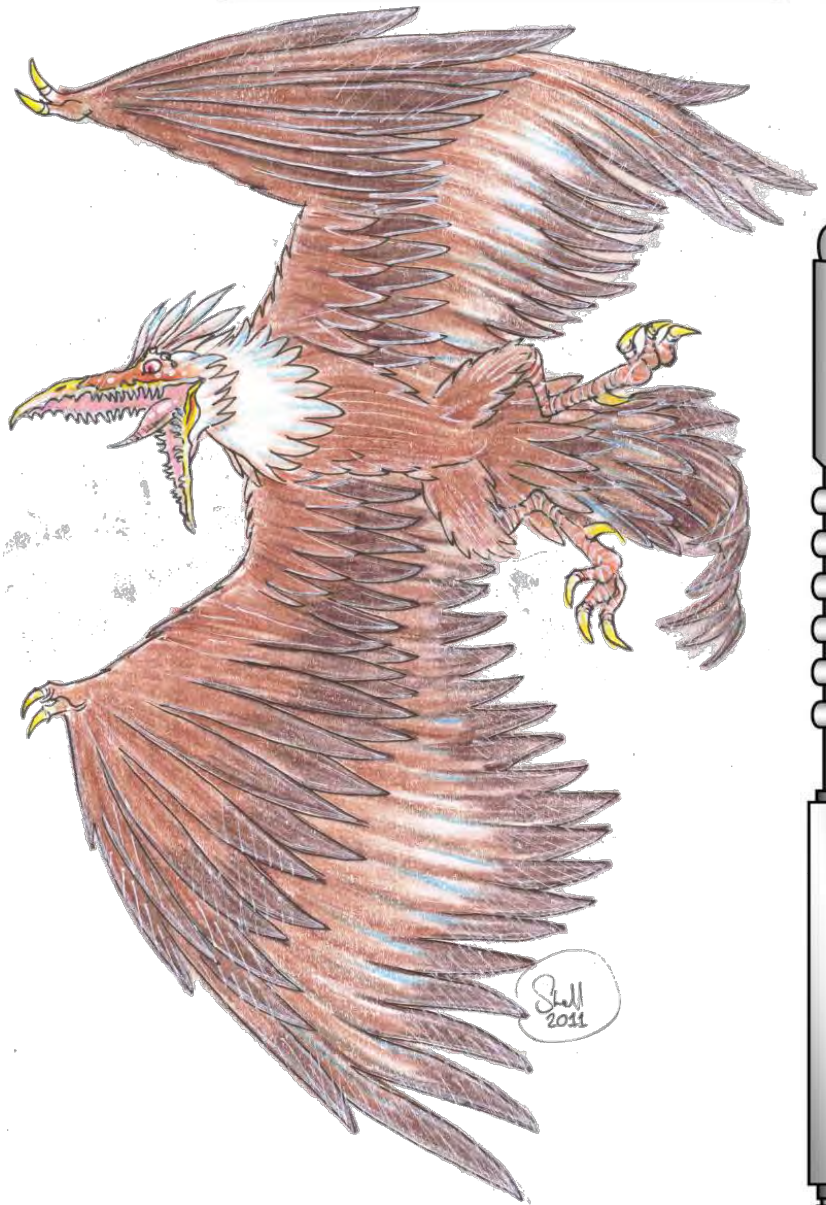
Description: A flying, gossamer creature, the vik't-ziir is curiously similar in structure to a jellyfish, though its form looks more like a ray. It is not an aquatic creature. It skims low over water, dipping its feeding strands in to grab small fish and crustaceans; its only attack on larger creatures is accidental. Even though vik't-ziir can grow up to three meters long with a wingspan of four meters, its transparent tissues make it difficult to notice until it is too late. While it cannot feed on anything larger than 50 centimeters or 10 kg, such creatures stung are dropped, and are likely to drown in the waters below.



Zaliss

Type	Large carnivore
Number	1-4
Move	Medium (75 meters/turn)
IM/RS	5/50
Stamina	110
Attack	55
Damage	2d10 claws (x2), 1d10 bite
Special Attack	Dive-bomb (when diving on a target, adds +20 to attack, to bite once and then fly to safety)
Special Defense	None
Native World	Rupert's Hole; plains and grasslands.

Description: A giant, winged creature, the zaliss is a feathered saurian predator. With a wingspan of over 10 meters, and a length of five meters, snout to tail, a zaliss makes an intimidating sight. Its feathers are golden-brown, with a white crest on its head. It has a long, toothed mouth, and huge (20 cm), sharp talons on its feet. Zaliss prefer to soar high above, searching for prey, and then dive swiftly, attempting to kill in one swift attack. If it must it will continue attacking, but will fly away from an obviously stronger foe.



SPACE SHIPS

STREEL "RAVEN" CLASS CORVETTE

By Gary Cliff/BD Cerridwen/Georgie

Streel "Raven" Class corvette

Hull Size	4
Classification	Paramilitary Starship
Engines	2 Class A Atomic Drives
ADF / MR	3 / 3
Hull Points	25
DCR	32
Weapons	Laser Battery (RD; RA:9; DTM:0; HDR:1d10) Laser Cannon (FF; RD; RA:10; DTM:0; HDR:2d10)
Defenses	Reflective Hull, Masking Screen x2
Sensors	RADAR, cameras, portholes (2)
Communications	Videocom (5 screens), Subspace, Intercom (1 control, 34 speakers)
Hatches	2
Minimum Crew Requirements	Pilot 3, Astrogation 1, Engineer 1
Cost	1,252,740 Cr

* Base model does not include launches, workpods and equipment

Systems:

- **Life Support** (1 primary rated for 50 persons for 30 days, 1 backup with the same rating)
- **Computer** (Atomic Drive 4, Alarm 2, Lockout 3, Damage Control 2, Astrogation 1, Life Support 1, Transportation 1, Communications 1)
- **Astrogation** (Standard Starship Grade)
- **Lifeboats** 0 (optional equipment)
- **Lifepods** 5

Description:

The corvette is, from its very inception, a flexible design for a paramilitary, armed and armored transport. Three separate classes were first laid out by Streel engineers for a handful of varied uses. The most notorious (and the primary subject of this article) is the Raven class. This is a modification on the original commerce raider version of the corvette design, called the Raider class, which mounted an additional laser battery in the nose instead of the Raven's laser canon. The UPF saw scant need for a commerce raider and rejected it as a ship of the battle line. Some few were purchased for use as fast fleet supply ships primarily for delivering atomic fuel and rocket ammunition to deployed task forces. A few militias also use them as excise cutters due to their ability to carry a platoon of troops and seize contraband. Still, sales of the Raider

class to legitimate customers were underwhelming. It first saw action in its intended role in Streel's own corporate wars around Laco's World and Alcazaar. Here Streel outfitted a number of contract mercenaries with the few Raider ships it built. They were effective in harassing Pan Galactic and CDC efforts in those systems, but seemed to lack a certain punch.

The Raven class, with its improved laser canon design squeezed into its nose, first appeared in the White Light system. In fact, the class is named after the flagship of a band of pirates that operated there. The Raven became known Frontier wide following a battle with the Clarion militia assault scout Osprey. The battle reinforced its limitations as a ship of the line, but its success in interrupting commerce in White Light has proved its excellent capability in its intended role. Streel finally had buyers lining up for its commerce raider, almost all of them paying in cash.

As noted earlier, there are two other classes of corvette made by Streel. One is primarily a passenger hauler with very small cargo holds and is termed the Nightingale class. Its primary function is as a rescue / hospital ship, although many are converted into stately private yachts. Armed with only a laser battery, it has improved acceleration and often mounts improved astrological equipment as well. The UPF bought several of these versions prior to the corporate wars to deploy to outpost worlds.

The Pintail class retains the larger cargo hold and troop decks of the Raider and Raven classes, but mounts only a laser battery. It too has the increased acceleration much like its sister class, the Nightingale. Envisioned as a fast freighter or exploration craft, its improved armor and masking screens make it an excellent blockade runner and smuggler platform. The rumors from Laco's World have Streel sponsoring one or more special operations groups in this class of ship to run past UPF / Star Law peacekeepers. Outside of Streel, handfuls of independent exploration outfits have purchased and currently use Pintail class ships kitted out for exploration.

All corvettes feature a central elevator that runs from the Bridge to Engineering (or the lowest non-cargo deck). They also have two semi-external elevators that run from Deck VI to Deck IX. The primary purpose of these elevators is to quickly move marines from their barracks to the main airlock. They also serve to maximize floor space in the cargo hold by not taking up the valuable real estate at the center of the ship. One of the big pluses of the corvette is its ability to fly in atmospheric conditions using atomic thrust. However, the decks and controls are not designed for horizontal flight, so all crew and other passengers must

be secured in their seats or bunks. All corvettes are designed to be able to land (tail sitting position) on planets. Landing gear extends from the wings at the tail. The cargo bay does not come with a standard cargo arm, but there is a crane arm with heavy duty cable and winch that can extend out of the bay doors and be used to lower cargo to the surface. It can safely handle the weight equal to two explorers per lift 1G.

TYPICAL CREW

The table below outlines a typical crew for the standard Raven class corvette under military service. Civilian organizations differ based on corporate structure.

The typical crew consists of six officers and up to 40 warrant officers and men. With such a small crew, none of the officers tend to be above a lieutenant's grade. In fact, some Raven class vessels are commanded by a junior grade lieutenant with the separation of authority among the officers being determined by time in grade differentiations. Small ships like the corvette tend to mean young crews and young officers.

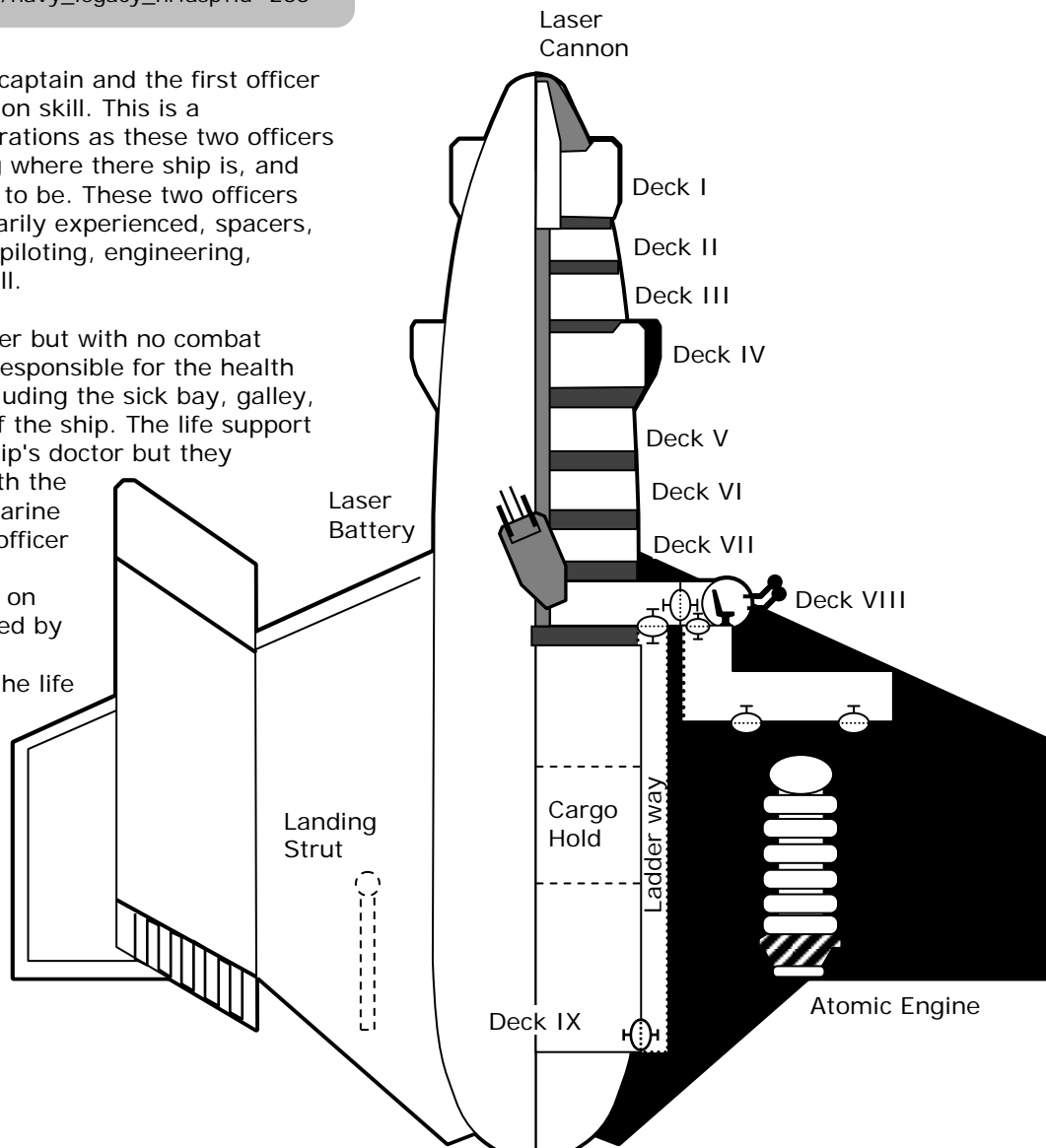
Author's Note: Rank commentary is based on U.S. Navy as outlined at this website:
http://www.navy.mil/navydata/navy_legacy_hr.asp?id=266

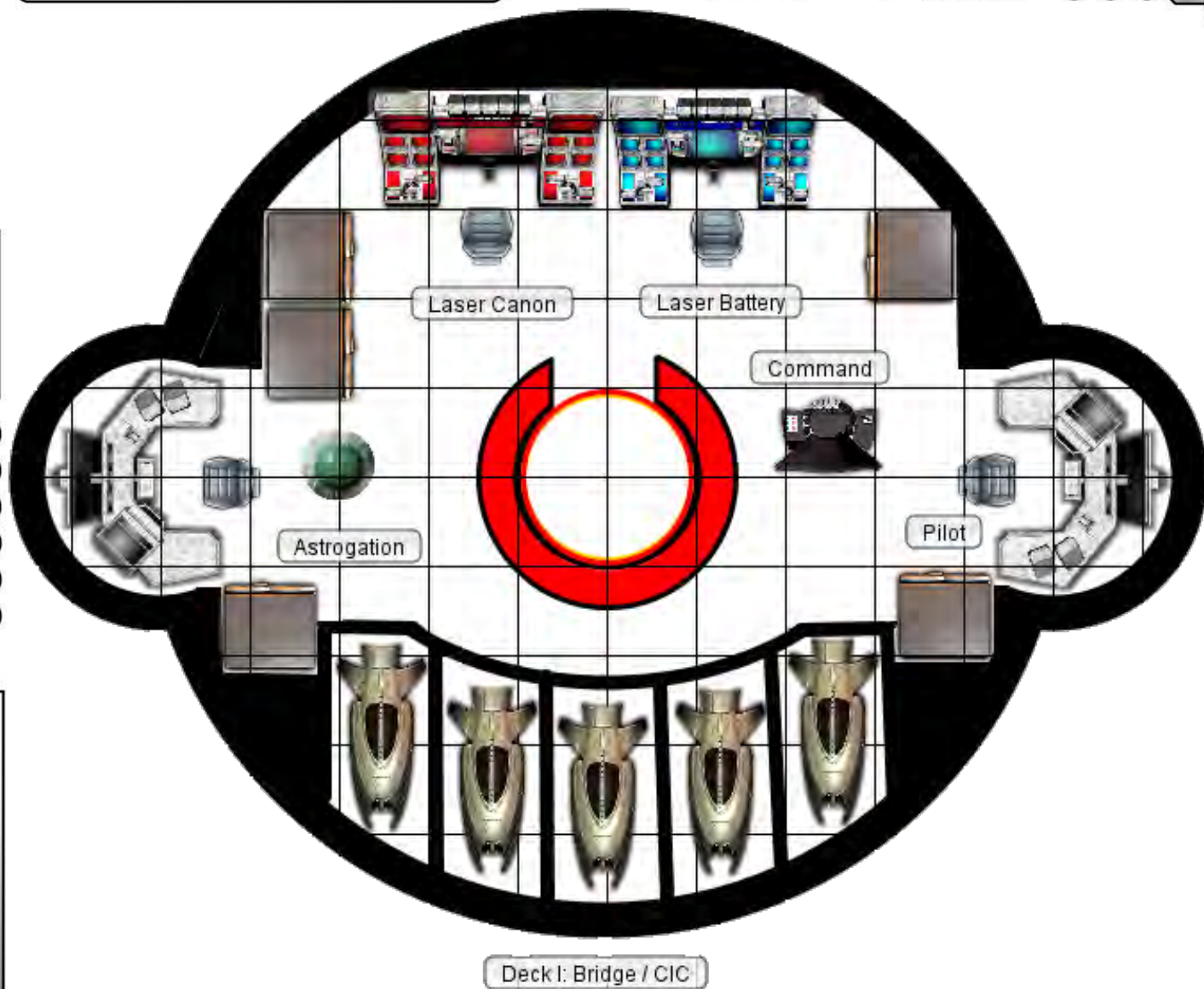
You will note that both the captain and the first officer are listed with the astrogation skill. This is a requirement in military operations as these two officers are responsible for knowing where their ship is, and getting it to where it needs to be. These two officers are educated, if not necessarily experienced, spacers, and are very likely to have piloting, engineering, and/or gunnery skills as well.

The ship's doctor is an officer but with no combat command authority. He is responsible for the health and welfare of the crew including the sick bay, galley, and Life Support sections of the ship. The life support technician reports to the ship's doctor but they also work in conjunction with the engineering Section. The marine medics are also under this officer when not deployed off ship. Any of the non-officer roles on board the ship are often filled by members of the marine detachment. This includes the life support and engineering technicians as well as medics, galley workers, cargo handlers, etc.

Role	Count	Skill	Min Level
Captain	1	Astrogation	1
First Officer	1	Astrogation	1
Chief Engineer	1	Engineering	1
Second Engineer	1	Engineering	1
Marine Lieutenant	1	Any Weapon	1
Ship's Doctor	1	Medic	4
Pilot	2	Pilot	2
Life Support Technician	1	Technician	1
Engineering Technician	2	Technician	1
		Robotics	1
Computer Technician	2	Computer	1
Marine Trooper	33	Any Weapon	1
Total Crew	46		

Download Steel Raven Class Corvette Deck plans;
<http://starfrontiersman.com/downloads/misc>





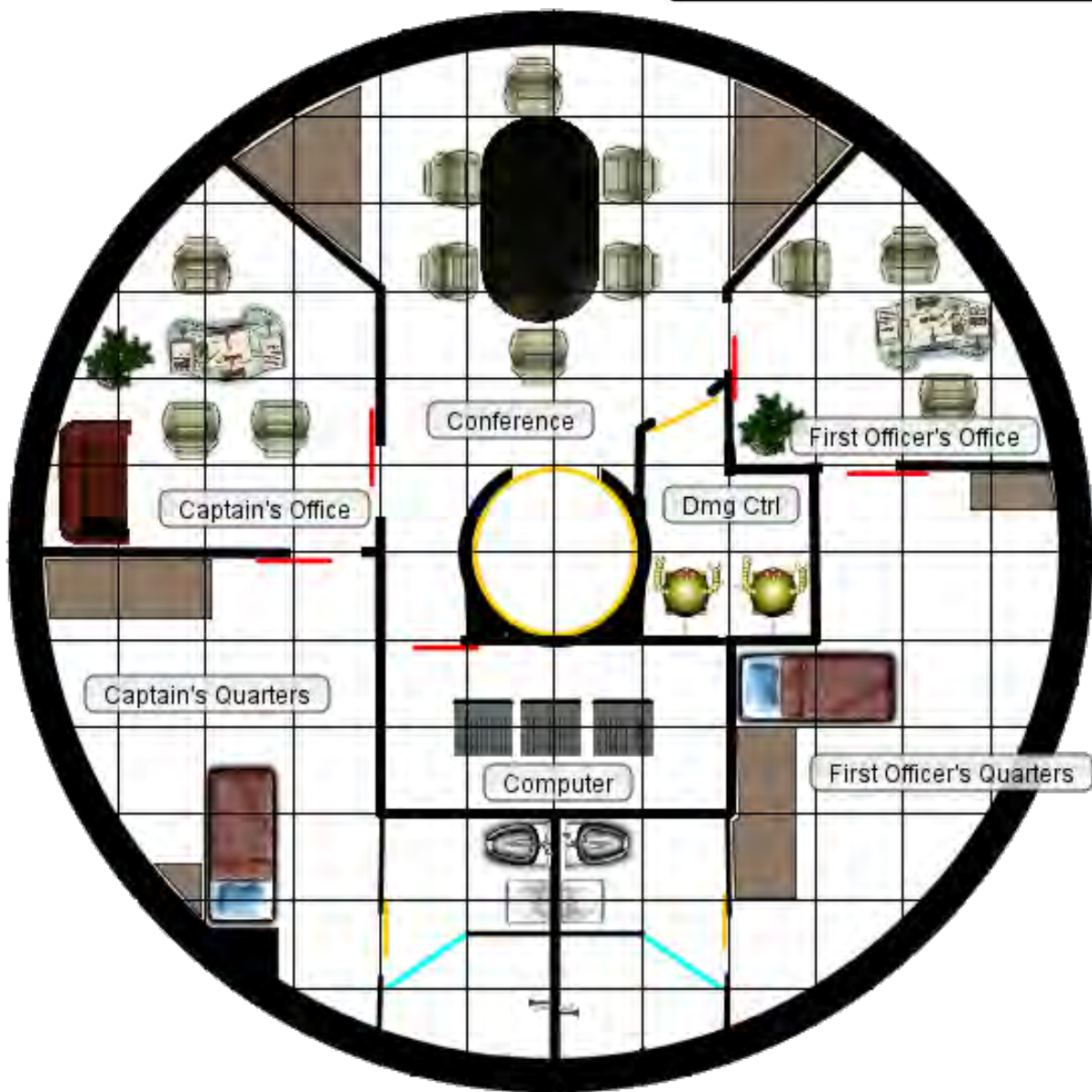
Deck I: Bridge / CIC

DECK DESCRIPTIONS

DECK I: BRIDGE

This deck encompasses everything necessary to command and control the ship. Also referred to as the Combat Information Center (or CIC), its central feature is the Streel designed Holographic Command Chair (HCC). This advanced captain's seat is plugged into the computer and can control any system on board through its holographic interface. Along the hull of the ship is the various machinery associated with communications and control interspersed with lockers for the storage of spacesuits and damage control materials. The ship's two portholes are on this deck, one each above the astrogation station and the pilot's station. The elevator will only open on this level for those with Bridge level security clearance. Bridge staff being valuable, there are five lifepods on this deck. They are designed to launch dorsally for use in atmospheric flight. Each station has its own intercom speaker. The stations in the CIC are as follows:

- (a) HCC
- (b) Battery Station
- (c) Canon Station
- (d) Pilot Station
- (e) Astrogation Station

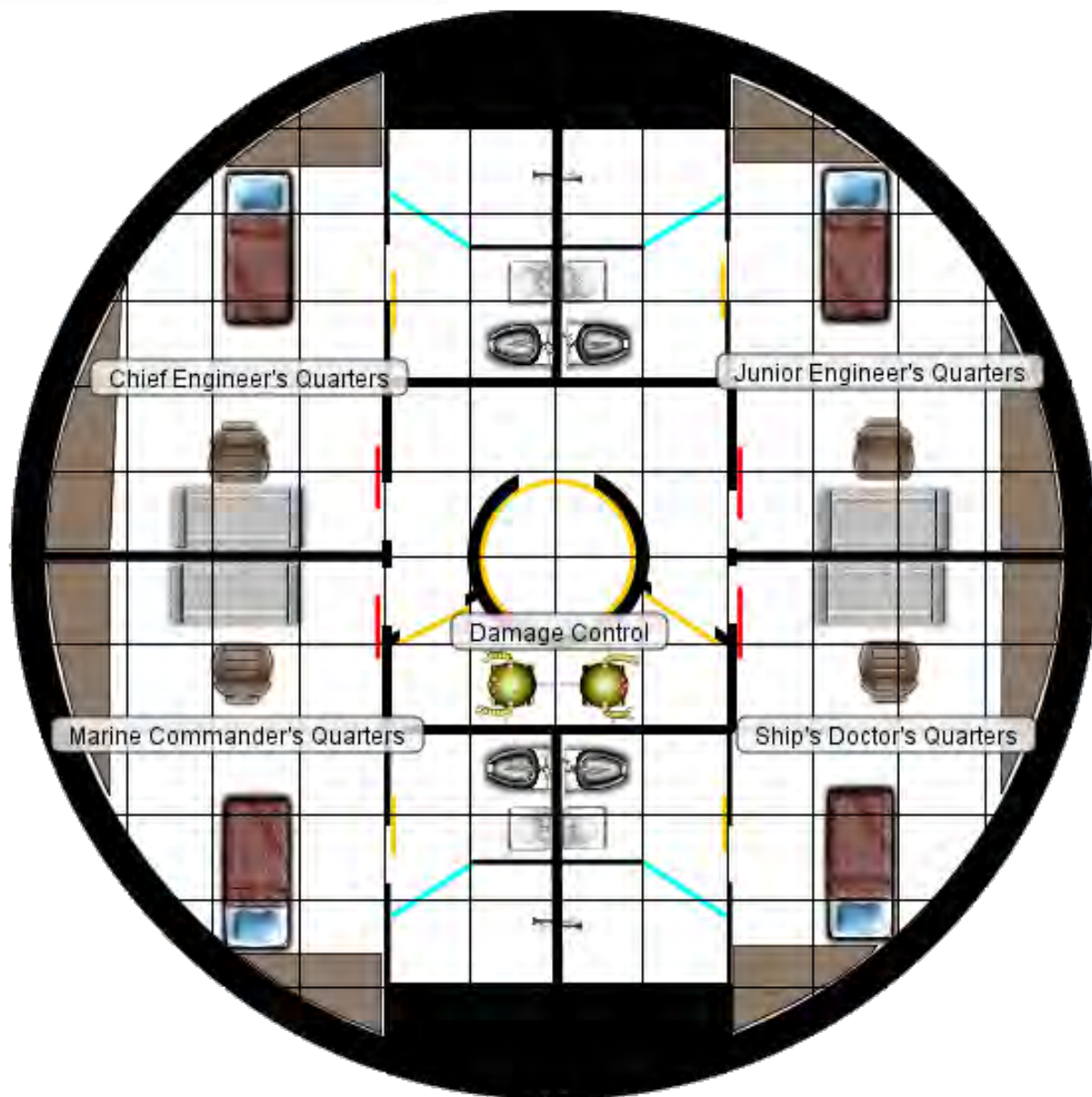


Deck II: Senior Officer's Quarters

DECK II: SENIOR OFFICER'S

This deck houses the staterooms and offices for the captain and first officer, as well as an officer's mess/conference room, damage control locker, and the computer room. Both offices have computer access. The officer's mess area has a pair of cupboards for storing dinnerware and assorted drinks. Each office has a videocom screen. Intercom speakers can be found in the conference room, each office, and each cabin. The damage control locker is designed to contain hull patches and other parts for the quick repair of essential equipment found on this deck. It has a charging station for two standard bodied robots.

- (a) Captain's Cabin
- (b) Captain's Office
- (c) First Officer's Office
- (d) First Officer's Cabin
- (e) Damage Control Locker
- (f) Captain's Mess / Conference Room
- (g) Main Computer Room

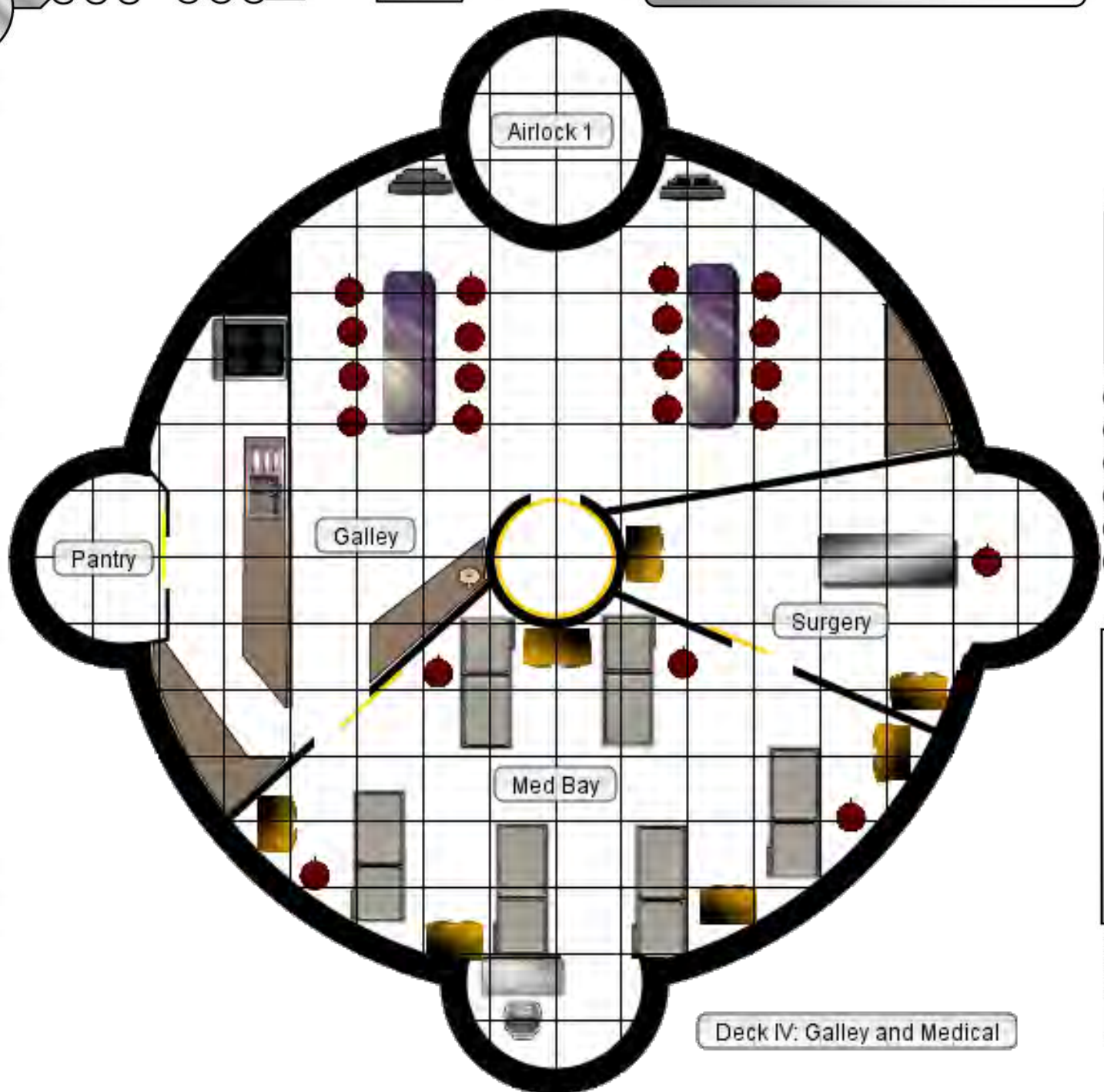


Deck III: Officer's Quarters

DECK III: REMAINING OFFICER

The remaining officers have staterooms on this deck. This includes the two engineers, the ship's doctor, and the marine lieutenant. Each cabin has its own intercom speaker. The damage control locker is designed to contain hull patches and other parts for the quick repair of essential equipment found on this deck. It has a charging station for two standard bodied robots and holds cleaning materials and spare linens for decks II and III.

- (a) Chief Engineer's Cabin
- (b) Junior Engineer's Cabin
- (c) Ship's Doctor's Cabin
- (d) Marine Lieutenant's Cabin
- (e) Damage Control / Storage Closet

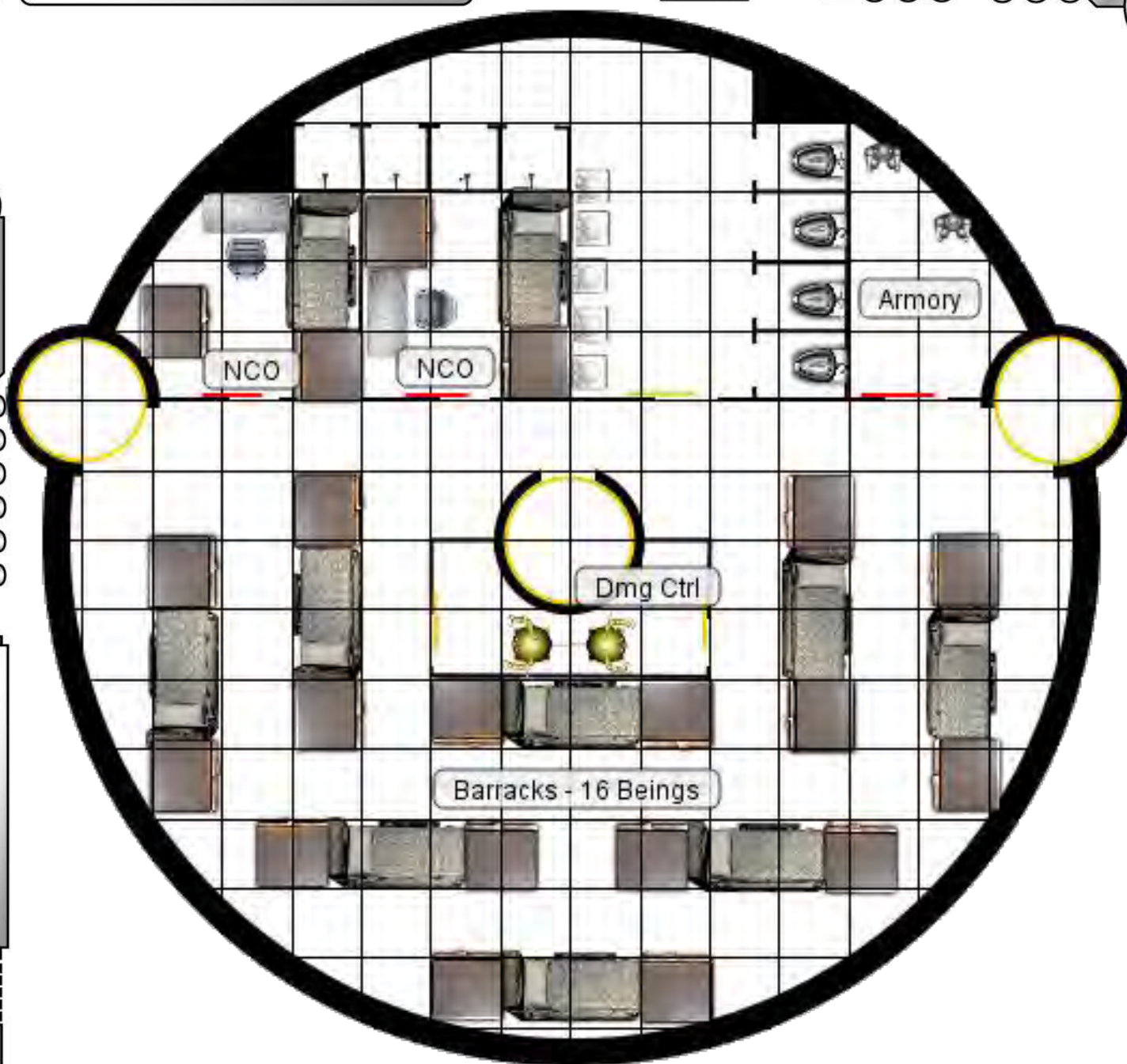


DECK IV: GALLEY AND SICK BAY

The galley is capable of feeding sixteen crew members in a single sitting. An intercom speaker is located in the kitchen area and the dining area near the elevator. There are two vid-com screens allowing the crew to watch shows broadcast in their current system or recorded in the ship's communications program. The ship's docking airlock and hatch is on this deck on the ventral 'fin' just forward and opposite of the laser battery. The sick bay consists of a surgical bed and several exam/recovery beds, each of which has its own life support (using spacesuit packs) and can be enclosed for isolation purposes or emergency survival. There is an intercom speaker at the doctor's desk and in the surgical room.

DECK V:

The main equipment for sustaining life on board the ship is situated on this deck. It is a warren of pipes, air ducting, water and air tanks, compressors, and pumps. There is a single intercom speaker located near the elevator. As a vital area, the elevator is default programmed to open here only for officers and life support technicians.



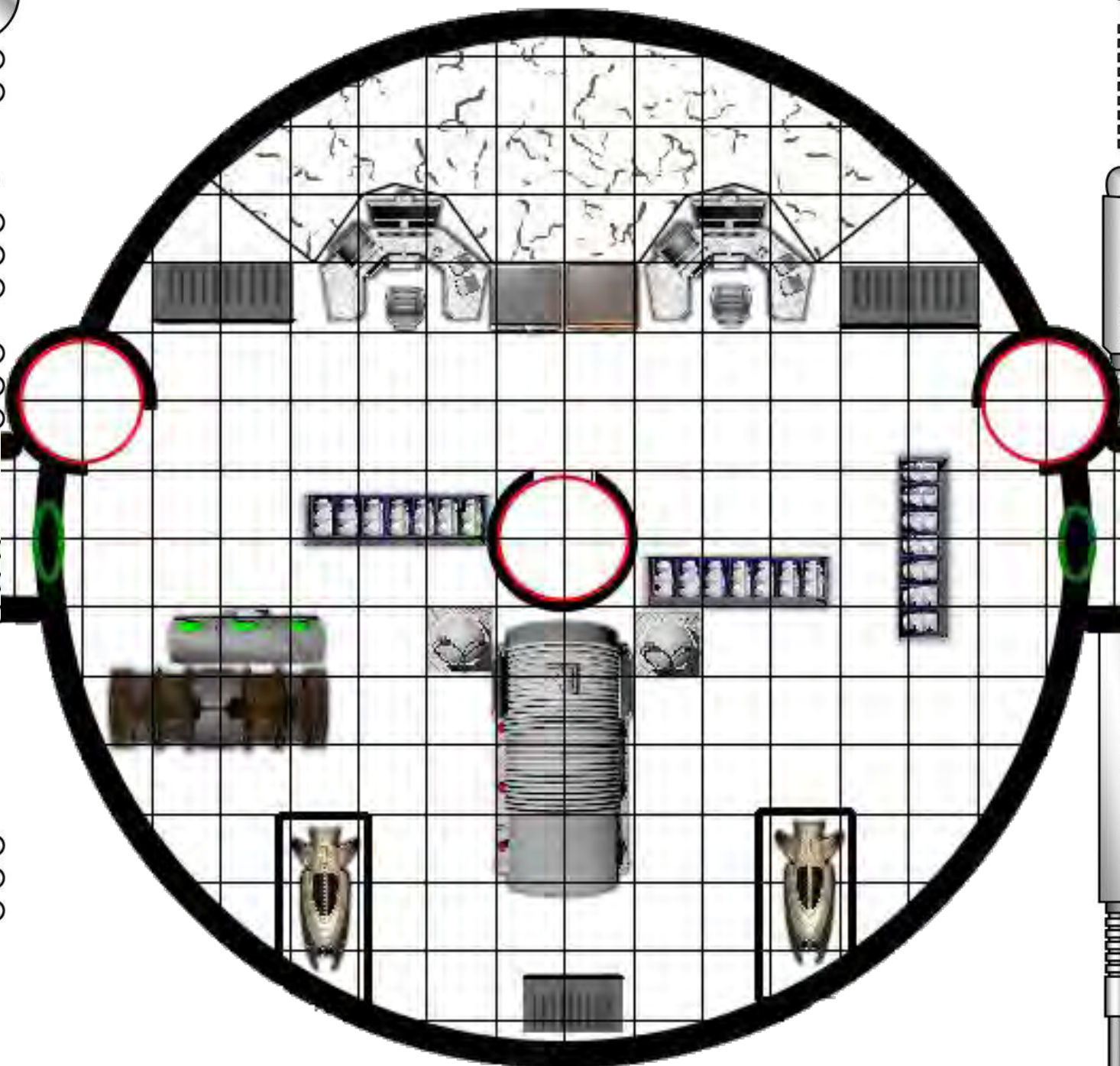
Decks VI & VII: Barracks

DECK VI & VII:

This deck is an open barracks for the enlisted crew members. It is filled with double bunks and lockers which store their meager personal belongings and spacesuits. There are also two small cabins that typically are assigned to the senior non-commissioned-officers (NCO) of the marine detachment or senior technical crew members. Each barracks has an arms room for the secure storage of weapons and charging stations for 2 standard bodied robots (usually combat robots). Normally only senior NCOs and officers have access to the arms room. There are two additional elevators starting on Deck VI that are slightly exterior running under and partially into the wings on the ventral side of the ship. These elevators run all the way to the main airlock on Deck IX. Either elevator can stop at Deck VIII (Engineering) or at any of the three cargo

decks. The barracks deck also has a damage control locker for storing materials necessary for making emergency repairs to the systems on these decks with charging stations for two standard bodied robots. Any double bunk / locker combination can be replaced with 4 charging stations for standard / anthropomorphic (non-Vrusk) bodied robots. Intercom speakers are found in the common area (near the elevator), each NCO cabin, and the armory.

- (a) Common Bunk Area
- (b) Head
- (c) Arms Room
- (d) NCO Quarters
- (e) NCO Quarters



Deck VIII: Engineering

DECK VIII: ENGINEERING DECK

This deck stores most of the tools and equipment to maintain and repair the ship. All access is restricted to engineering crew members and officers only. Narrow passageways lead through the wings to the engine nacelles for maintenance and repair. At the top of each nacelle is a small airlock that can contain a workpod or small launch, giving the engineering team easy access to the ship's exterior. Just inside the wing is a ladder well that runs all the way down to Deck IX. It gives access to each level of the cargo bay as well. There is a winch and cable that can be used to lift heavy items from any of the cargo bay hatches or Deck IX. The ladders are inset into the walls to avoid lifted items

becoming snagged. Engineering staff being valuable, there are two life pods on this deck. Each engineering workstation has its own intercom speaker. The main intercom control panel is on this deck.

DECK IX: MAIN AIRLOCK

This is the main airlock from which the marines will usually embark during a boarding action. There is a single intercom speaker co-located with the airlock controls. The deck immediately below can hold four large launches.



BATTLE AT EBONY EYES

Edited By William Douglass



A STAR FRONTIERS

KNIGHT HAWKS GAME SCENARIO

By William Tracy

From Dragon Magazine #88 August 1984

For as long as the oldest spacer remembers, the enigma of the Ebony Eyes has existed. It was discovered accidentally by a tramp freighter, captained by a human named Eboniyes. Over the years the phenomenon became known as the Ebony Eyes, both after the captain and the presence of black holes.

Located exactly halfway between the systems of Dramune and K'aken-Kar on the Frontier Sector Map (p. 51, STAR FRONTIERS Expanded Game Rules), the Ebony Eyes are two unique black holes that orbit one another, lying only 160,000 kilometers (16 hexes) apart.

Both singularities are almost equivalent in size and strength. Anything coming within 50,000 km (5 hexes) of one of the Ebony Eyes is lost, and will fall into the

singularity within minutes. Rescue and escape are impossible.

It is possible for a ship to take up an orbit around one of the Ebony Eyes at a 60,000 km (6 hex) radius; the ship would move at one hex per turn, and could start a scenario already in orbit around the Eye. An orbiting ship would have a speed of zero. A ship may enter orbit around an Eye by coming within six hexes of it at a speed of one, moving along the proper orbital path, and then turning off its engines. A safe "window" exists between the holes (30,000 km wide, or 3 hexes) for ships to travel through without risk of having their flight paths altered by the singularities' enormous gravitational pull.

The two black holes, designated Ebony Eyes Alpha and Ebony Eyes Beta on official UPF astronavigation charts, are relatively small compared to average black holes. But an interesting phenomenon occurs around the Ebony Eyes that is known at no other known black hole location. Because these two black holes are so close together, the temporal and spatial fields around them have been twisted out of shape. This phenomenon causes illusory duplicates of anything that enters the area to appear. The duplicates (0-3 of them, determined by rolling 1d5-2) will appear within a few kilometers of the original object (in the same hex as the object), and will make every move that the original object makes. The duplicates will shoot illusory weapons if the original does, and the beams and missiles launched will be duplicated as well (though duplicates will have no effect on targets). Energy sensors, radar, and all other detection devices will not be able to tell which object of an identical set is real and which is not.

BACKGROUND TO THE BATTLE

Every galactic year a special research ship is sent to the Ebony Eyes to check on any changes in their energy patterns and to try new experiments. The ship stays for two standard days and is usually accompanied by a small military escort, since some of the most important scientists in the UPF are involved in the research.

This year a larger than usual military escort was sent with the research ship (the Ensten); an increase in Sathar hostilities in recent months brought this about. The military vessels were instructed to protect the Ensten at all costs and also planned to conduct maneuvering and weapons drills in their spare time. The trip to the Ebony Eyes was uneventful and soon the scientists aboard the Ensten were happily taking

readings. The crews of the UPFS vessels, however, were nervous because of unusual energy transmissions they picked up as they entered the system. They were also unused to the "duplicating" effects of the local space-time distortion.

Only minutes after taking up positions at the Ebony Eyes, the UPF crews were shocked to discover what appeared to be an enormous Sathar war fleet coming around the side of Ebony Eyes Beta. The Sathar had gone undetected as nothing could be seen, visually or using long-range detectors, of what was on the other side of the Ebony Eyes (which are surrounded by whirlpools of matter and dust extending out to 50,000 km).

The Sathar were just as surprised, and believed that a major UPF fleet had discovered the base of operations they had established at the Ebony Eyes some months ago, from which they had successfully raided UPF space and eluded discovery. The famed Battle of Ebony Eyes resulted.

It was certainly one of the most unexpected military actions to have taken place with the Sathar, and it proved to be one of the most confusing battles as well.

UPF SHIPS

UPFS Ensten

Research Vessel

DCR:	70
ADF/MR:	4/3
HP:	40
Weapons:	Laser battery
Defenses:	Reflective hull

UPFS Admiral Clinton

Battleship

DCR:	200
ADF/MR:	2/2
HP:	120
Weapons:	Disruptor Cannon, 3x Laser Battery, Proton Battery, 2x Electron Batteries, 4x Seeker Missiles, 8x Torpedoes, 10x Rocket Batteries
Defenses:	Reflective Hull, Electron Screen, Proton Screen, Stasis Screen, 12x Interceptor Missiles

UPFS Honor

Light Cruiser

DCR:	100
ADF/MR:	3/2
HP:	70
Weapons:	Disruptor Cannon, Laser Battery, Proton Battery, Electron Batteries, 4x Torpedoes, 6x Rocket Batteries
Defenses:	Reflective Hull, Electron Screen, Stasis Screen, 12x Interceptor Missiles

UPFS Chivalry

Destroyer

DCR:	75
ADF/MR:	3/3
HP:	50
Weapons:	Laser Cannon, Laser Battery, Electron Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 2x Masking Screens, 5x Interceptor Missiles

UPFS Faith

Destroyer

DCR:	75
ADF/MR:	3/3
HP:	50
Weapons:	Laser Cannon, Laser Battery, Electron Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 2x Masking Screens, 5x Interceptor Missiles

UPFS Electron

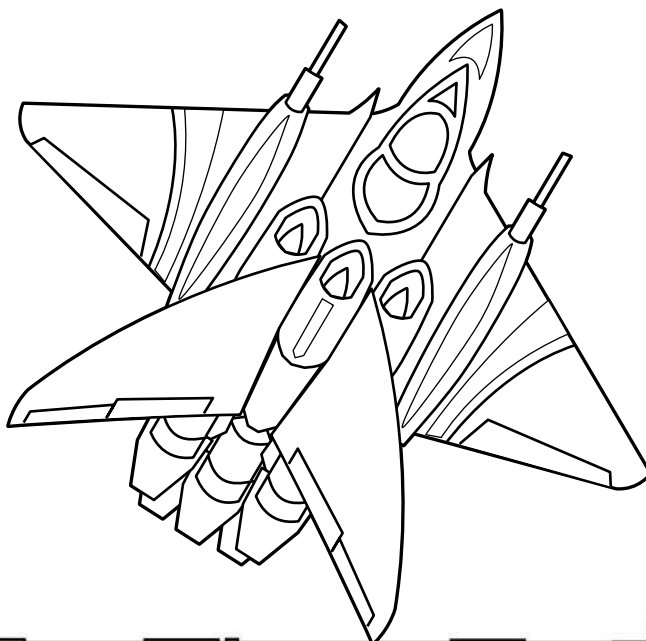
Frigate

DCR:	70
ADF/MR:	4/3
HP:	40
Weapons:	Laser Cannon, Laser Battery, Electron Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 4x Masking Screens, 4x Interceptor Missiles

UPFS Proton

Frigate

DCR:	70
ADF/MR:	4/3
HP:	40
Weapons:	Laser Cannon, Laser Battery, Electron Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 4x Masking Screens, 4x Interceptor Missiles



SATHAR SHIPS

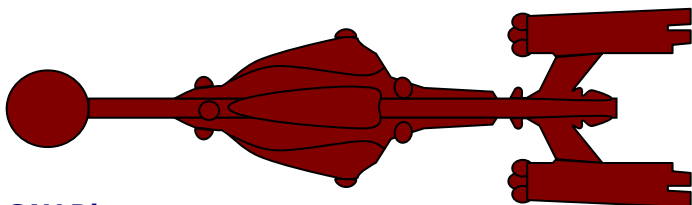
SAVB Nova

Fortified Space Station

DCR:	150
HP:	300
Weapons:	5x Laser Battery, 16x Rocket Batteries
Defenses:	Reflective Hull, 4x Masking Screens, 12x Interceptor Missiles

SAV Blood War
Heavy Cruiser

DCR:	120
ADF/MR:	2/1
HP:	80
Weapons:	Disruptor Cannon, 2x Laser Batteries, Electron Battery, Proton Battery, 4x Torpedoes, 8x Rocket Batteries, 2x Seeker Missiles
Defenses:	Reflective Hull, Electron Screen, Proton Screen, Stasis Screen, 8x Interceptor Missiles



SAV Disease

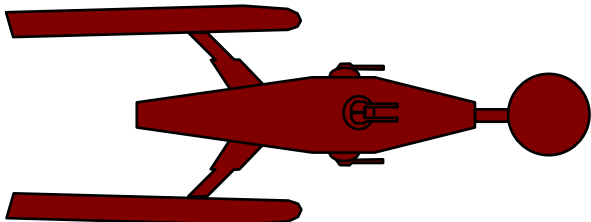
Frigate

DCR:	70
ADF/MR:	4/3
HP:	40
Weapons:	Laser Cannon, Laser Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 2x Masking Screen, 4x Interceptor Missiles

SAV Apocalypse

Frigates

DCR:	70
ADF/MR:	4/3
HP:	40
Weapons:	Laser Cannon, Laser Battery, 2x Torpedoes, 4x Rocket Batteries
Defenses:	Reflective Hull, 2x Masking Screen, 4x Interceptor Missiles



The following 10 fighters are based aboard the fortified station Nova:

Fighters A-J

DCR:	30
ADF/MR:	5/5
HP:	8
Weapons:	3x Assault Rockets
Defenses:	Reflective Hull

SAV Famine

Light Cruiser

DCR:	100
ADF/MR:	3/2
HP:	70
Weapons:	Disruptor Cannon, Laser Batteries, Electron Battery, Proton Battery, 4x Torpedoes, 6x Rocket Batteries
Defenses:	Reflective Hull, Electron Screen, Stasis Screen, 8x Interceptor Missiles

SCENARIO SET UP

The following is a list of the ships that fought at Ebony Eyes, with the hex number that each begins the game in and their direction of facing (see below).

It also lists their speed when the battle begins. Use the appropriate counters for the ships, upside down planet counters for the black holes, in the miscellaneous ship counter for the Ensten. Direction of facing is indicated by an alphabetical letter, A-F, that follows each ship's hex number. The following diagram shows in which direction a ship will face on the Knight Hawks game map:

Ship	Location	Movement
Ebony Eyes Alpha	Hex 2019	Stationary
Ebony Eyes Beta	Hex 3519	Stationary
UPFS Admiral Clinton	Hex 3526 D	Full stop
UPFS Honor	Hex 3326 F	Full stop
UPFS Chivalry	Hex 2929 E	Full stop
UPFS Faith	Hex 4033 C	Full stop
UPFS Electron	Hex 3233 D	Full stop
UPFS Proton	Hex 4229 A	Full stop
UPFS Ensten	Hex 3426 E	Full stop
SAVB Nova	In orbit Hex 4119	1 hex/ turn
SAV Blood War	Hex 2816 D	2 hexes/ turn
SAV Famine	Hex 3611 B	2 hexes/turn
SAV Disease	Hex 4116 C	1 hex/turn
SAV Apocalypse	Hex 4116 C	1 hex/turn
SAV Fighters	Hex 4119	Aboard the Nova

SPECIAL RULES

A referee will be needed for this scenario. At the start of the game, the referee should roll dice and determine how many copies of each ship exist (d5-2), and then inform the players of the results for both their own fleet and that of the enemy. The referee will have to keep track during the game of which ships are discovered to be copies and which are found to be real. This can involve some elaborate bookkeeping. Targeting computers and personnel will not be able to tell the difference between real ships and their illusory copies. If a real ship uses a weapon, any copies of it will appear to shoot the same type of weapon. Individual "to hit" rolls should be made for all weapons, both from copies and (of course) real ships.

If one of the rolls is determined to hit a target, determine randomly whether the target ship or a copy of it (if any) was struck. If an illusory weapon hit a

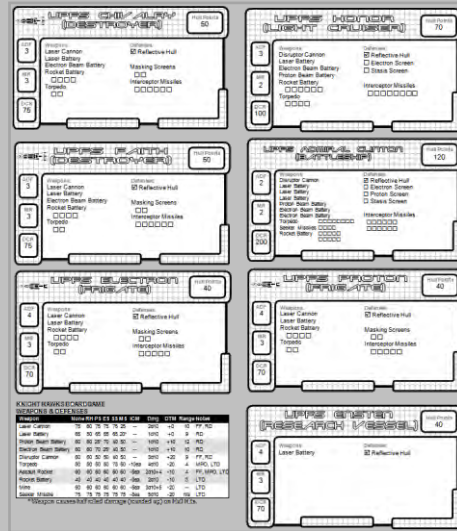
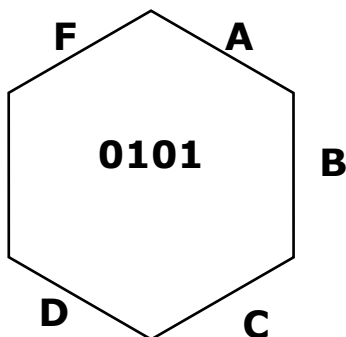
real ship, the ship's crew can determine which ship fired the weapon and can disregard that ship when firing back.

Thus if a ship and its two copies fired missiles at another ship and only an illusory missile hits, the target ship can disregard the "fake" ship that fired the illusory missile when returning fire, and can thus permanently increase its chances to find which of the copied ships is the real one.

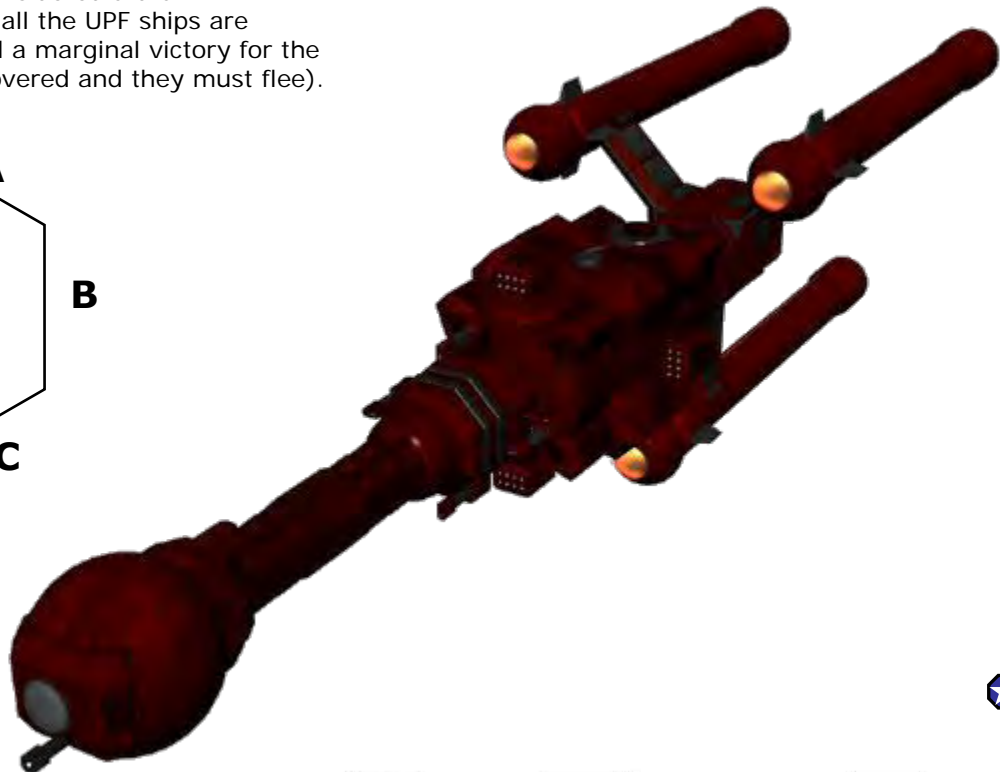
If a real ship is hit by a real weapon, it will take damage and so will its copies. A real weapon hitting a fake ship and a fake weapon hitting a fake ship will produce no effects, but no one except for the referee will be able to tell if the weapon hitting the fake ship was real or not.

TACTICS AND VICTORY CONDITIONS

- » The Sathar will try to knock out the Ensten's engines, so that after defeating the UPF ships they can capture the Ensten's scientists (they have recognized what the ship is and how valuable its passengers would be).
- » The Ensten alone may attempt to escape the battle; both UPF and Sathar ships will not voluntarily leave the map until one side or the other is conquered. The Ensten may escape by exiting the game board from the far left side, between hexes 0101 and 0139.
- » If the Sathar see they will not be able to stop the Ensten from escaping, they will center their efforts towards destroying it. The Sathar will follow the Ensten until they are destroyed.
- » To win, the UPF ships must destroy all the Sathar ships, but not necessarily the space fortress, and keep the Ensten safe. If the Ensten is destroyed, but the Sathar ships (excluding the space fortress) are destroyed; the game is considered a draw.
- » If the Ensten escapes but all the UPF ships are destroyed, it is considered a marginal victory for the Sathar (their base is discovered and they must flee).



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SYSTEM BRIEF

CASSIDINE

By Allen Trussell

HISTORY

The Cassidine system was discovered in 249pf (Pre-Federation) by Malcolm Cassidy, founder and CEO of Cassidy Dynamics, the forerunner of Cassidine Development Corporation. Cassidy named the star Cassidyne after his company; the star was often misspelled until it eventually was officially listed as Cassidine. The initial settlement in the system was a conglomerate of human, vrusk and dralasite business entities, which gave the third planet the name Triad. In the same year, Malcolm's brother Rupert built a small base on the second planet, which served as a combination bar, settlement and outpost which was named Rupert's Hole, which the world is still called to this day.

Malcolm Cassidy named the planets in the Cassidine system after animals, places and people in his family's history. The innermost world of Emu after a large flightless bird, Dingo and Koala likewise after other animals, while the gas giant Canberra after an ancient city on Earth. Sheila was named for Cassidy's ex-wife, for whom he had no positive emotions. Bunyip, an eccentrically orbiting world, was named for a mythical creature of Earth history, which could often be heard but never seen. Bunyip's orbit and immense gravity causes many Kuiper objects and asteroids in the system to shift their orbit suddenly, sending them into the inner system or out into space.

PEOPLE

The people of Cassidine are of two kinds; first, those of Triad are very business-like and accustomed to the refinements of a high-tech society. Triadians are very cosmopolitan, as they are a mixed society. Those of Rupert's Hole are of a different sort altogether. Holers are independent, free-wheeling and used to living by their own labors. Holers are almost all human, and while they bear little animosity around non-humans, they are not necessarily as open as Triadians. Triadians often view Holers as backwards, unkempt and unruly, while Holers see Triadians as elitist, slick and banal. Despite this disparage in opinion, the residents of Cassidine are proud of each other and the achievements they have made.

PLACES OF INTEREST

Lake Vast: A huge inland fresh water sea, where a major spaceport of the same name lies. Lake Vast supports a large fishing industry for Triad, and its waters have been kept pristine despite the bustling city on its shores. The sprawling city of Lake Vast stretches around the shore of this inner sea, its districts named for various arms and branches of the body (East Estuary, South Bay, Reedville, Tri-river, etc.). Interplanetary Industries has its headquarters here, in a vast, fortress-like complex in West Isles.

Malicon Valley: A center of high-tech research and development, Malicon Valley gets its name from the famed Malicon University, an institution founded early in Triad's history as a place of higher learning. The dralasite scientist Malbood is credited as the founder and leading director of Malicon University. Graduates of Malicon U found the idyllic setting a perfect place to set up business, and soon many high-tech industries flourished here. Among the many businesses headquartered here is Nesmith Industries, a major high-tech megacorp.

New Hope: The capital of Triad, and governmental center of the system. New Hope is a planned city, the first community built on Triad. Intended to be a meeting place and trade center, it nonetheless pales in comparison to sprawling Lake Vast. Nevertheless, New Hope has many governmental and corporate buildings here, many of which are indistinguishable from one another. Cassidine Development Corporation is headquartered here, in the same building as the National Council.

Rupert's Hole: The original outpost which has grown into the capital of the planet, Rupert's Hole is still a wild, rugged frontier town. Despite the presence of government offices and corporate holdings, often the only law on the streets is what the citizens can enforce themselves. This is not to say that a state of anarchy exists; rather, many small disagreements are handled between citizens, quickly and quietly. Rupert's Hole still has the original bar outpost, held as a landmark and national treasure.

Vista Plains: Miles of trackless plains, where Rupert's Hole agriculture exists, both ranches and farms. While arid, there is room enough that there is little dispute between ranchers and farmers, though a few predatory and nuisance animals can make things difficult for both. These grasslands stretch from sea to sea on the northern continent, hedged in on by the Great Range, the runoff of which provides ample rivers to spread irrigation.

Emu (Cassidine I) Hot desert
Mean Orbital Radius: 0.2 AU
Gravity: 0.853 g
Mean Diameter: 12,000 km
Moons: 1

Rupert's Hole (Cassidine II) Arid terrestrial
Mean Orbital Radius: 0.6 AU
Gravity: 0.9 g
Mean Diameter: 14,000 km

Triad (Cassidine III) Terrestrial
Mean Orbital Radius: 0.75 AU
Gravity: 1.1 g
Mean Diameter: 16,500 km
Moons: 1

Dingo (Cassidine IV) Cold desert
Mean Orbital Radius: 1.1 AU
Gravity: 0.64 g
Mean Diameter: 9000 km
Moons: 2

Sheila (Cassidine V) Rock
Mean Orbital Radius: 1.7 AU
Gravity: 0.24 g
Mean Diameter: 6000 km
Moons: 1

Canberra (Cassidine VI) Gas Giant
Mean Orbital Radius: 2.6 AU
Gravity: 8.86 g
Mean Diameter: 68,000 km
Moons: 5 major, 9 minor

Koala (Cassidine VII) Ice ball
Mean Orbital Radius: 3.9 AU
Gravity: 0.12
Mean Diameter: 5000 km

Bunyip (Cassidine VIII) Gas Giant
Mean Orbital Radius: 6.6 AU
Gravity: 3.9 g
Mean Diameter: 240,000 km
Moons: 4 major, 15 minor

THE PLANETS

EMU (CASSIDINE I)

Type: Hot desert

Mean Orbital Radius: 0.2 AU (29,919,574.2 km)

Local Year: 47.89 galactic standard days (31.93 local Triad days)

Local Day: 47.89 galactic standard days (31.93 local Triad days)

Gravity: 0.853 g

Mean Diameter: 12,000 km

Atmosphere: 95% carbon dioxide, 3% nitrogen, trace others

Mean Temperature: 900 C

Moons: 1

Notes: Emu has a dense atmosphere of carbon dioxide, nitrogen and nitrogen oxide. Along with its tidal locking, this has created a world with extremely high temperatures, totally unsuitable to any endeavor. Attempts have been made at mining by CDC, due to the planet's proven mineral wealth, but the extreme heat has thus far foiled all such work.

RUPERT'S HOLE (CASSIDINE II)

Type: Arid terrestrial

Mean Orbital Radius: 0.6 AU (89,758,722.6 km)

Local Year: 248.87 galactic standard days (165.91 local Triad days; 248.87 local Rupert's Hole days)

Local Day: 20 standard hours

Gravity: 0.9 g

Mean Diameter: 14,000 km

Hydrosphere: 20% (0.02% ice)

Atmosphere: 77% nitrogen, 18% oxygen, 3% carbon dioxide, trace others

Climate: Desert, arid and dry terrestrial climates, from temperate to tropical, with mediterranean climates along some coasts and rivers.

Mean Temperature: 18.9 C

Trade: Industry – various chemicals and machined goods; agriculture – while much of the world is arid, there is sufficient grazing land for herds of animals, as well as farmland which produces some excellent wines.

Government: Democratic Republic; the people of Rupert's Hole elect representatives to serve in a Congress, overseen by the President. The government is intended to be as small and unobtrusive as possible, as the population values independence, though the needs of the growing population has bred a certain amount of bureaucracy.

Population: 95 % human, 5 % others; 2.5 billion

Space Stations: ASS, TS

Notes: Founded by Rupert Cassidy, this world was populated by those who valued freedom, independence and self-sustenance. That spirit exists still today, even though much of the planet has been settled. There are still large tracts of untamed land, set aside as natural preserves. Most of the population lives in the dozen or so large cities concentrated around the rivers and sparse coastlines. The planet has one large inland ocean, with a few small seas, though there is a sufficient river and lake system to provide fresh water for life. The flora and fauna are well-adapted to the dry climates of Rupert's Hole; of particular note are the treasure-berry bush, which is delicious and nourishing,

and the parasitic aore fly, which is a nuisance to all living things in the bush. Predatory zaliss birds roam the Vista Plains, and Gorlan's hunter, a slug-like creature with color-changing abilities haunts the waterways of Rupert's Hole.

TRIAD (CASSIDINE III)

Type: Terrestrial

Mean Orbital Radius: 0.75 AU (112,198,403.25 km)

Local Year: 347.8 galactic standard days (231.87 local Triad days)

Local Day: 30 standard hours

Gravity: 1.1 g

Mean Diameter: 16,500 km

Hydrosphere: 60% (8% ice)

Atmosphere: 74% nitrogen, 21% oxygen, 3% water vapor, 1% carbon dioxide, trace others

Climate: Arctic to tropical terrestrial, with varied biomes. Plains and forest predominate.

Mean Temperature: 15.2 C

Trade: Industry – many manufactured goods, machines and chemicals are made on Triad; technology – many high-tech electronic, integrated computer components, biotechnologies and research facilities are found in the cities of Triad.

Government: Constitutional Technocapitalism. The technological industries of Triad elect from their numbers representatives to serve on a National Council which is responsible for providing infrastructure, defense and welfare programs for the population, in accordance with a constitution. The head of this Council is the Prime Minister, and has the power to break ties or overturn National Council rulings.

Population: 30% human, 30% vrusk, 20% dralasite, 15% yazirian, 5% others (8.3 billion)

Space Stations: ASS, DS

Moons: 1; Evergleem – This moon has recently been colonized, as it has sufficient mass (6.464×10^{23} kg) to sustain terraforming, a triumph for CDC. While the atmosphere remains thin and the gravity is light (0.38 g), conditions are improving. Fewer than 25 million citizens live on Evergleem.

Notes: Triad is a lush world of generally pleasant temperatures and varied biomes, with extensive development of its natural resources. Most native life is kept in biological preserves, though the gossamer vik't-ziir roams the skies, more an annoyance than a real danger. There are several large cities on each of Triad's five continents, and even a few floating sea-cities and other exotic dwellings. The spaceports of Triad are constantly busy, traffic arriving and departing at all times of day and night. The moon Evergleem is visible in the sky most nights and some days, and the bustling communities there can be seen as distant points of light.

DINGO (CASSIDINE IV)

Type: Cold desert

Mean Orbital Radius: 1.1 AU (164,557,658.1 km)

Local Year: 617.76 galactic standard days (411.84 local Triad days)

Local Day: 18 standard hours

Gravity: 0.64 g

Mean Diameter: 9000 km

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KI'KAT-TU VRUSK MASTER MAGICIAN

By Eric Winsor

Alex Stone reporting from *Flavor of Fromeltar*, Sengsen, Terledrom, Fromeltar system.

The holo has been all chatter lately about the **Wiggling Brothers Circus** that has been touring the Frontier. I have to admit that I hadn't been to a circus since I was a kid and had no intention of zapping eight credits per ticket from my bank account to see a bunch of kids stuff. But, my good buddy Muba rolled me on this one. Muba caught the show while on assignment on Prenglar and he was just bulging about the magic act. I'm okay with magicians and have seen my fair share of women cut in half and vanishing hover cycles. I couldn't imagine what was so great about this show that would have Muba bellowing and changing shape so much. He kept going on about how it was a vrusk magician and he did shapes funnier than anybeing he had ever seen. So, I gave in and purchased tickets for the family when Wiggling Brothers stopped here on Terledrom.

I must take a moment to say that the entire circus was stellar and worth the credit spent. The dralasite strongmen really make some amazing living structures, the yazirian trapeze act was totally cool, and the menagerie of frontier creatures was wondrous. Yet I must note that magnigoggles are really needed if you are going to catch everything that the yazirian trapeze troupe displays. However, the crowning performance is undoubtedly Ki'Kat-Tu the vrusk master magician.

Ki'Kat-Tu was the third act after the intermission. The lights were darkened to a blackness matching the void and then you see the neon green outline of a vrusk levitating from high above. I found myself in awe at how he just hung there. Suddenly, there was a massive explosion of fire around him and then Ki'Kat-Tu was instantly center stage and the magic began. A very attractive young human woman joined him on the podium caressing his antennae then he touched her head and she imploded into millions of gems sparkling with light. He began gesturing with his hand, rolling his wrists and elbows in ways only a vrusk can, and gathered the gems together into orbiting rings about himself. Then with a flick of his wrists the gems flew through the audience and grouped together into various forms and images. Over a group of dralasite youth they changed from spheres, to cubes, to stars, and pyramids. They formed into a cresting wave in front of a group of human and yazirian families and crashed fluidly through them in a rainbow of changing colors. Two vrusk businessmen who were spending too much time on their chronocoms were replicated above the audience in exquisite detail. The poor bugs were

notably embarrassed and paid particular attention to the remainder of the act. Then the gems formed back into the woman and she levitated directly above the audience. Ki'Kat-Tu spoke and gestured and she floated down into the aisle where two muscular dral picked her up and paraded her through the audience and out the back.

Following this wonder two other females entered through the audience. A female vrusk that I must say was one of the most fragrant I have ever smelled and a yazirian lady of supple form. When they reached the railing along the front row of seats Ki'Kat-Tu levitated them down into the center ring to his side. He then casually reached out with each hand and plucked their heads off and swapped them. And just as casually he levitated them back up into the audience where they mingled and chatted while he conjured items out of thin air. He pulled a gilded throne fit for a king and levitated a human man up onto it. The man's children were quite excited about this until in a flash they were suddenly transported onto the man's lap and the yazirian headed vrusk assistant reached up and set them spinning wildly. This caused a group of dralasites to begin rolling with laughter and pointing. Ki-Tah-Tu gestured at them and their body dyes washed up off of them into the air and formed a psychedelic sphere. The vrusk headed yazirian assistant snatched the sphere up and sent it bouncing about the audience like a beach ball. At one point he had an audience member consume cakes and then conjured them back. His head swapped assistants spoke with the voices of audience volunteers while they spoke with the assistants voices.

Fire and dancing gems were prominent throughout Ki-Tah-Tu's act. He even got the lone gorlian sitting three rows down from me relaxed with a big grin on his face. He conjured two translucent gel-like miniature dralasites that tangled in front of the gorlian as his private little show. They changed color and struggled valiantly with each other in a glimmering display which ended with them bursting into flame as one succeeded in knotting the other. Everyone in the audience experienced a gem or two dance about their outstretched hands or a fiery little figure running about above their heads.

At the end of the ten minute act Ki'Kat-Tu doused the bodies of his assistants with water and they melted leaving only their heads. The floating heads then began naming shapes and the water collected itself from the puddles on the stage and took on each stated shape. These shapes then floated above the audience where we were able to touch the water. The water glowed and pulsed with every color and was elegantly orchestrated to the music of the act. Finally he

collected the water in a sphere around himself with the heads of his assistance in each hand. He levitated up into the center of the arena with the water enveloping him and taking on each of the polyhedral shapes. Then at the climax of the music the water collapsed in upon itself and he was gone. Not a drop of water was left. The audience was awed and speechless.

Following the show I just had to meet Ki'Kat-Tu so I left the family playing games on the midway and pulled out the press card and went in search of this master magician. I am very pleased to report that I was treated well and Ki'Kat-Tu arranged to meet me for lunch the following day at Flavor of Fromeltar. Flavor of Fromeltar is a pretty classy place but I figured I couldn't miss this interview opportunity. I was sure the boss would reimburse the cost after seeing the show with me that night.

Ki'Kat-Tu was so cultured in human ways it shocked me. His anglo was excellent. He had already ordered a very palatable human appetizer when I arrived. Ki'Kat-Tu rose and greeted me with a handshake and offered me a seat. Such mastery of human manners! This was no ordinary vrusk. My planned questions were all shot off balance and I just had to find out what had gotten KT (he insisted I call him KT) so into magic and human culture. This is what I found out. KT was the typical vrusk larvae on track to a position in a corporation until his human studies course. One of the culture holos he was shown was about human entertainments. The film featured magicians and unlike most vrusk that get caught up on dispelling the tricks, KT was fascinated by the ingenuity of the tricks and knew he wanted to do them himself. His big problem was that he was still a larvae and all he could do was watch until his first molt. He begged the teachers and nurses to show him more but they always insisted the schedule and curriculum did not allow it. Several attempts to sneak over to the holo displays during rest periods were thwarted and put the nurses on constant alert to him. So KT took to imagining what the magic shows were like and put on his own shows in his mind.

KT was placed in an inventory management position with his parent's company after his first molt and saved all his discretionary money to order human holos about magic. He became fascinated by their presentation but found the magic to be less than what he had dreamed of as a larva. As he studied the human showmanship and mastered the magic the human magicians did he began researching how to do the magic he had dreamed as a larvae. Then he applied for every position available with his company on Gran Quivera so that he could be near the human clubs that showcased magicians. At first it was hard for him to get any stage time. All of the club owners were afraid that his bug appearance would disrupt the act and unnerve the guests. So KT took on street performing in his off hours to gain notice. One of the popular human magicians saw his act and invited him to join his act to help him break in. The first five years were all night jobs until KT developed the gems performance. After his first public performance of the gem act he became

the star of the night. Then one night an ifshnit watched his show and invited him to join Wiggling Brothers. KT resigned from the corporation and joined the circus. His newest magic, the water shapes, has brought him frontier wide attention. He is now being spot lighted on vrusk holo broadcasts and has developed a vruskan magic fan base. KT is optimistic that he will repay his nursery debt early from the vruskan media royalties starting to come in. The future is bright for Ki'Kat-Tu Vrusk Master Magician.

At the end of the meal KT rose, bowed, threw his cloak around his shoulders and vanished in a purple puff of smoke that smelled of lavender.

Alex Stone is a free agent society reporter and father of three brand new Wiggling Brother's Circus fans. He enjoys travel and outdoor adventure sports. He currently resides on Terledrom.

Author's Note: Character created by Eric "iggy" Winsor.



KI'KAT-TU
Vrusk Master Magician



FRONTIER FICTION

BUG HUNT

By Eric "Bilygote" Johnson

Gruk let a smile creep over his muzzled face as he squeezed the trigger of his laser rifle. The focused light reached out and went through the head of the approaching Klikk warrior.

"Praise the gods!"

The brave Yazirian shook his fist in defiance and victory. "Bring it on! I got more for you." The hair of his mane and collar blew in the hot desert breeze.

The human to his side was looking through magnigoggles. He was Cassidianian named Bladen Rand. They both lay in a hastily dug fighting position. The desert sand was threatening to bake them both.

"Nice shot, Gruk," said Bladen. "Looks like the rest are retreating."

The mantis-men were drawing back out of accurate weapon range. There had been seven but now there were three. The disciplined firing of the pair had been devastating.

"Look, maneless...they're running like Sathar."

Gruk, swept up by the hard fought victory, stood and shouted curses and taunts at the fading enemy. Sand kicked up near the two as one of the Klikks sent a parting shot their way.

"They shoot like Sathar too," said Gruk with a wide grin beneath his sungoggles. "Did you see the one I took out in mid-air? Come on, let's chase 'em down and give them what for!" A Yazirian's eyes are light sensitive. They wore eye protection even in what humans would consider normal brightness.

Bladen shrugged off the suggestion as he peered through the magnigoggles at their foes. Yazirians are known for their battle lust and bravado. "I think we may have to deal with more later. They're moving too orderly, not like they've just been routed."

"I bet they're getting reinforcements," stated Gruk. "They're predatory and enjoy the hunt. They'll be back with more of their kind. The question is when, not if. Like it or not they see us as prey. We had better find a better defensible position as soon as possible. Scef!" Scef was the Yazirian word for excrement.

Gruk held up the energy clip to his rifle. It showed enough Standard Energy Units for three shots.

"This is just interesting."

Bladen nodded. "I've got enough for one shot."

Bladen wiped the sweat from his brow. There was no use searching the dead. The Klikks they had killed didn't appear to carry any equipment. He stared at the lifeless figure nearest him. It was a big insectoid. Bladen guessed around three and a half meters at the shoulder. The Klikk had a three segmented body capped by a triangular head. Four log and deceptively powerful legs gave it speed and stability. His gaze lingered on the pair of raptorial arms it possessed. They were serrated, spiny and wickedly intimidating. The weapons looked as though they could punch through or shred all but the most hardened battle armor.

Bladen took a sip from his canteen. He was almost out of water. He guessed Gruk may have had a little more than him, which wasn't much. Their training had prepared them for situations like this. Bladen knew that they wouldn't last long on this arid dust-ball without finding a source of water. As Bladen returned his canteen to his belt, he thought about the events that had lead to their current situation.

They had been in the service of Sector 6, dedicated to the rooting out of Sathar plots and spies. Bladen and Gruk had been recruited separately for this special mission to gather intelligence about a shadowy new potential threat to the UPF.

Driven by dedication and curiosity Bladen had readily agreed to be part of the team that undertook the mission. That is when he met the big Yazirian and the other team members.

They were given a heavily modified assault scout, christened "Specter." The ship had technology incorporated into it that would make it very hard to detect and confusing when it was detected.

They had entered into this uncharted system when sensor contact was made with an unknown vessel the size of a UPF frigate. They immediately went into stealth mode.

The power was cut. The lighting was barely enough to do their jobs. Active sensors were powered down. The ship should have looked like a random piece of space flotsam.

Somehow the Klikks had seen through their stealth technology and cut loose on them with the ship's massive railguns. The projectiles accelerated to .03C prior to making a ruin of the Specter. The ship crash landed on this moon of the system's prime Jovian.

Most of the team was dead. Bladen and Gruk had to leave the bodies in the smoking hulk's wreckage. They had barely enough time to salvage working equipment and

vacate the ship. The Klikks sent a strike team to the site with very little delay.

The shipwrecked pair had trekked through the desert for two days with their pursuers hot on their trail. When the mantis-men caught up with them, the fight had been hectic. It was quickly evident that the Klikks were formidable opponents. Their tactics were sound but the human and Yazirian were desperate. Gruk had even taken one out in mid air with his zamra. They had beaten off the assault by sheer luck and force of will.

Despite their current circumstances, Gruk was glad he had been chosen for this assignment. He was going toe-to-toe with some of the fiercest opponents he had ever faced. Gruk was fascinated by the Klikk warriors. They were lightning quick and physically more than a match for any of the Frontier races that he was familiar with. However, this fascination did not prevent him from pummeling them with blasts from his laser rifle.

Bladen cursed his luck. How had they penetrated the ship's stealth anyway? He had been on similar missions into Sathar territory and come away without a scrape. They needed to get more information. The only bit of luck they had was that neither he nor Gruk were injured. However, it was only a matter of time before they were overpowered.

"Well, dog face," said Bladen, lifting his rifle, "let's get on the move. If we stay here, we're either going to dehydrate or be shot."

"It's almost dark," stated Gruk. "Look over there. I think the terrain is different." Bladen looked in the direction he was pointing.

Bladen pulled out the magnigoggles again. Off in the distance, several kilometers away, broken land was evidenced. He put them up and hefted his rifle.

"Good eyes. Let's go that way. Maybe we can find some water and a good place to make our last stand."

The sun slowly sank on the horizon. The gas giant, of which this moon orbited, dominated the sky day or night. Four of the sister moons shed light to illuminate the darkness. Bladen was consumed by thirst. It hurt when he swallowed. It hurt when he didn't swallow. In fact, his whole body ached from the punishment of the last few days. Hope seemed to fade with the sun light. They trudged on.

Bladen glanced over at Gruk. His face was a stoic mask. The Yazirian's steps seemed effortless. Bladen knew better. Gruk was probably worse off than him. He was panting heavily. Yazirians lacked the sweat glands possessed by humans. They were at home in a temperate arboreal climate, not at all like the one the two currently found themselves in.

Bladen almost tripped when they entered the broken terrain. He let out a curse from between clenched teeth. He steeled himself to greater effort. As they continued, Bladen searched for any plant life that may indicate water. The gullies and ravines revealed nothing except more sand.

"There has to be water on this ball, somewhere," said Gruk. "The gods can't be that cruel to let us whither after our victory."

They continued, trudging along like zombies in a low budget tri-vid.

The moons swam with shades of red as they each sank in turn behind the gas giant. Both soldiers were exhausted. They spied an outcropping and decided to make camp under it.

Bladen licked his lips, "There's not a drop of water on this whole forsaken moon. I don't think I could take another step."

"I'll take first watch," stated Gruk as he struggled to keep his eyes open.

"I wouldn't worry about it," said Bladen. "We're too tired to put up a fight. If the bugs kill us in our sleep at least we won't die from a lack of water."

Bladen fell asleep within minutes.

Bladen awoke to Gruk's grinning face. Bladen started as the Yazirian resembled a hideous nightmare image from a primordial past.

"I see something in the distance to the west," declared Gruk as he placed the magnigoggles in the still groggy human's hands. "It could be a hill. I can't tell at this distance and lighting. It could be a mirage."

"We'll look in the morning," said Bladen irritably. "Go to sleep. We've got a journey ahead of us." He dozed off.

Bladen drifted into a dream. He was alone and trekking across the moon. The landscape was different, verdant, however he instinctively knew it was a perverse version of reality. The sky was aurora such as he had never seen before. It was more a miasma of sickly yellow and green. A twisted walled city lay before him whose gigantic proportions seemed to rise with every step closer.

The details came into view. The cyclopean stone blocks which composed the bulwark oozed a slimy green substance. The open entry gate was decorated in an alien script, more like hieroglyphics than letters. One of the characters caught his eye and held it. It resembled nothing that he had ever seen, almost indescribable. It appeared to be a squid headed dragon. Bladen determined that the obscene image repeated in several places. Dread grabbed at his soul. Bladen felt as though this was dwelling place of the damned instead of an alien society.

A dark wet rotting smell permeated the place. Bladen steeled his nerves and crept through the gate. His senses were heightened. The aspects of the buildings were all wrong. They appeared different each time he looked at them. The geometry shifted sometimes slightly sometimes more noticeably. Bladen was getting vertigo just standing still. The dreadful feeling he had was reaching a crescendo of anxiety. His sanity was becoming unraveled. The Cassidianian turned just in time to see a tentacle or possibly a pseudo pod lurch out and wrap around his neck.

His parched throat woke him. Bladen sat up in a cold sweat. He took a sip. Maybe one swallow was left. Gruk

snored in the shade of an out cropping. It seemed to Bladen that the Yazirian was having bad dreams of his own. He peered to the west. Bladen lightly kicked the sleeping Gruk.

"I guess you weren't seeing a mirage," stated the human as he adjusted the magnigoggles. "It's not a hill, too oddly shaped."

Gruk was on his feet instantly. He looked around with his zamra in hand. Bladen handed him the goggles. He let out a surprised grunt.

The zamra was a Yazirian ceremonial dueling weapon commonly carried by warriors. The sharp-edge disk was about ten centimeters in diameter. It was commonly thrown. A zamra was just as deadly when used in close quarters combat. Gruk was wearing his gauntlet to protect himself from the wicked weapon.

"It looks like a buried city to me," stated Gruk as he stretched one arm, pulling the patagium on that side taut.

Yazirians had fleshy appendages or flaps of skin on each side that allowed them to glide for short distances. This, coupled with their intellect, allowed them to become the dominant life form on their planet of origin.

"Let's get moving, before the heat sets in."

They began their trudge across the unforgiving landscape. Bladen began to make out features as they drew closer. It was ancient. Uneven walls, towers and battlements were exposed. Bladen surmised the sight would have been discouraging to would be raiders. However, now it was mostly submerged under this sea of sand.

"I don't like the looks of this," complained Gruk.

"What's not to like? We're dead men on their way to a dead city. It's perfect. Maybe we can find a source of water in there and a defensible position by the time the Klikkers catch up to us."

Gruk let out a curse and shook his head but he didn't change direction. Bladen felt a surge of excitement as now he believed they had a chance of surviving. His pace picked up as the ruins crept closer.

"Who knows," Bladen began. "Maybe we'll find some lost treasure of some long dead alien king."



"More like the reason this place fell to ruin," retorted the big Yazirian.

As they crossed the dunes, the details of the outer city came into focus. The place

seemed to be constructed from huge blocks of a sickly greenish stone. The blocks were weather beaten, yet were not smooth. The perimeter wall was shattered in places revealing the buildings beyond. Bladen sucked in his breath in astonishment as he estimated the proportions of this long dead alien mecca. The foggy memory of the dream screamed at his consciousness. He shook his head and continued forward.

The sun was high overhead when they made it to the outskirts of the city. They crossed a dune that carried them over the ancient outer wall. Both beings gazed upon the sand choked ruins. Nothing moved, decay was evident in toppled monolithic columns larger than the ship that carried them to this venerable moon. Uneasiness settled over the pair. Something was tugging at both of their minds, something invisible, something older than time. Gruk's hackles went up. Bladen shrugged it off to dehydration.

What looked to be one of the main streets lay before them. It was very broad and sand covered. Columns lined both sides of the avenue. Statues sat atop most of them. Others lay in pieces half buried in a sandy grave toppled by the elements and time. The images were mostly humanoid but not of any of the known races. All were bestial in aspect, adding to the pair's uneasy feelings.

"Something about this place is familiar," stated Bladen. "I can't put my finger on it."

"It could be the Tetrachs," suggested Gruk.

"I don't know, maybe," replied the Cassidianian. "If it is, this is the best preserved Tetrach ruin ever discovered."

The civilization known as the Tetrachs died out an estimated one hundred and six standard centuries ago. They are credited with seeding and/or elevating most known races. The evidence proving their existence is spotty at best but has been enough to bring a consensus in the xeno-archeological community.

The two approached a plaza that had a statue in its center. Bladen stopped. He stared at the image. It was familiar but alien. Upon the raised pedestal sat the horrid image from his dream, the squid headed dragon.

Bladen looked at Gruk. He saw recognition in the Yazirian's expression.

"This is an abode of devils. All we'll find here is death or something worse," muttered Gruk.

Fear started to creep into the soldier's heart. "Dead aliens can't kill us, but a lack of water will," stated Bladen trying to quell his rising uneasiness.

"We'll find water then take our chances with the Klikks," said Gruk.

"Agreed," replied Bladen. "Let's take our last drink and face our end like warriors," he continued. "Maybe the UPF will find our bones and give us proper burials." A grim smile crossed their faces.

The two drained the last of their water. The fate of the soldiers now rested with chance. They crept along the streets single file with ten meters between them. The

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silence of the necropolis seemed to heighten both fearfulness and awareness. The Cassidianian half expected one of the bestial monstrosities pictured in the statuary to come barreling around each corner.

Bladen's mind eventually started to wander. He thought of watching his two daughters swimming. They were at one of the pools on his level of the Morgaine Archology on Ruppert's Hole. He believed he would never see them again and they would never really know his fate. His family would be told that he was disintegrated in a "training accident."

The pair came to what had to be one of the largest buildings in the city. The wood composing the titanic double doors had fallen and rotted away centuries before.

Once inside they were still ankle deep in sand. The unearthly majesty and awful beauty struck at them from the shadows. Massive columns supported a ceiling that was hidden in the darkness above. Gruk raised his sungoggles. The two treaded carefully.

The sand around them showed no sign of disturbance. No living thing had passed in countless years. A breeze could be felt but it offered little in the way of relief from the stifling heat of the day.

The silent splendor of the hall made Bladen wonder who had built this place. All of the proportions were gigantic. What did they look like? Were they represented by one of the repulsive statues? Where had they gotten the building material? They had not seen anything resembling a quarry on their way to this place. Were there other cities nearby?

There had to be a water source for this city to sustain a large population or this place would have never had been built. Where was it? Did it go dry, effectively killing this city? Bladen shook his head to clear it. The answers to his questions may never be known. He needed to focus on the tasks at hand.

"Gods of Yaz," exclaimed Gruk as they entered another grand room, "This place is endless." They crossed the room at a cautious pace. The warriors came across what appeared to be an altar. Behind the altar was another statue of the squid headed dragon. This one was different than the one in the plaza. This statue contained intricate details that the other did not. The craftsmanship appeared to be that of a master. However, Bladen was repelled by the unease that he felt in its presence. Surely this was a place of sentient sacrifice to the unwholesome thing.

They passed through several more rooms until they came to a broad stair well. The steps lead downwards into gloomy blackness. Gruk stopped.

"I don't think going down is going to find us some water. I think we need to go a different route," stated Gruk flatly.

"What?" asked Bladen.

"I don't want to expend the energy unnecessarily," started the Yazirian, "and this place is giving me the creeps."

"Well wait up here then," said Bladen. "I'll recon down there to see if there is anything of value. I'll be back in ten mikes."

"I like the idea of being alone less," replied Gruk. "Take the point maneless."

The soldiers mounted the stairs. They seemed to be endless as the pair descended lower and lower into the dark. Bladen and Gruk had to help each other from one step to the next. Soon they could not make out the top through the inky black.

"I sure hope... you know... what you're... doing," stated Gruk between pants. It was cooler but still stifling as they plunged further into the bowels of the place.

"You're not the only one," muttered Bladen under his breath. He did not like the feeling he got from this long dead temple of slaughter. Something deep inside was telling him to flee as fast as he possibly could and never look back.

As they neared the bottom of the stair, a light source became evident. The two could not tell where the light came from only that it existed. They entered a large domed circular chamber. There were no windows. The pulsing radiance that they were observing originated elsewhere.

They stopped transfixed by what they saw. On a pedestal in the center of the hieroglyphed room was an alien contraption that emitted the light. Lying on the floor around the thing were several skeletons. Some appeared intact, some did not. All were of unknown origin.

Bladen quickly ordered, "Check your rad badge."

"Mine's clean," reported Gruk.

A functional alien artifact, possibly from the Tetrachs, Bladen's excitement was growing. He started towards it. The human stopped as Gruk firmly gripped his shoulder.

"Don't touch it," said Gruk. "It could be booby trapped."

"What?" asked Bladen snapping out of his trance.

"Think about it," continued the Yazirian. "How many other artifacts have we seen?"

"None," answered Bladen as he scratched the back of his head.

"Why is this one here? Why has it not been looted or taken when this place was abandoned?" asked Gruk. "Do you think the bones around it might be an indicator that something is not right?"

"I see your point," stated Bladen. "I don't know what came over me. It was like I was a bug being drawn to a light, hypnotized by its beauty."

Bladen looked at the object more critically now. He had never seen anything like this. He could scarcely guess its function. Whatever it was, it had sucked him in immediately. He shuddered to think what would have happened if his companion had not been there to pull him back to reality.

The deep layers of dust on the floor indicated an antiquity older than recorded history. No being had traversed the room in untold centuries, possibly millennia. The soothing

radiance caressed him reassuringly. It seemed to say come to me and all of your fears will dissipate in the light.

"Do you think we can get it?" questioned Bladen, his eyes locking on the artifact once more.

"Snap out of it," ordered Gruk grasped the Cassidian's arm and spun him around so they were face-to-face. "This place is a deathtrap and that thing is the bait. I'm not going to be stranded here by myself because you fell prey to a giant bug zapper."

"You're right," agreed Bladen violently shaking his head from side to side trying to clear his head.

"Wait! Did you hear that?" questioned the Yazirian. He looked from side to side finally turning to face the stairs. "We've got company."

The two soldiers instinctively entered the room and looked for fighting positions. The crack of a slug thrower being fired stopped the two. The chamber echoed with the high pitched screams of Klikk warriors as they poured in. They were cornered.

As Bladen drew an aim on one of the aliens, Gruk was already firing. His shots hit their marks with deadly effect. Gruk began swinging his rifle like a club. A Klikk went down with a split head beneath the savage strike.

Bladen had to make a choice. He could shoot the Klikk bearing down on him or the one taking aim at Gruk. He fired past the slaving alien coming at him. The beam found its mark leaving a smoking hole in its target.

Gruk, zamra in hand, waded into the onrushing hoard. Cries of battle lust and unearthly screams of surprise and outrage echoed throughout the dome.

The Cassidian raised his rifle in defense as the Klikk closed on him. The swinging raptorial arm went wide due to his attacker not being able to get a firm footing on the dust covered stone. The mantis-woman recovered in time to see the human's rifle butt smash into her head. The rifle stock shattered beneath a spray of blood and gore.

A raptorial arm pierced Bladen's left shoulder from behind. The pain made him drop to his knees. He vomited. Bladen saw a Klikk poised to strike the coup de grace. A screeching order spared his life.

Bladen struggled as his wrists were held together and some kind of goopy resin was applied. Pain shot through his shoulder.

The Cassidian had been captured in a matter of a few seconds. Meanwhile, Gruk had severed several Klikk limbs as he moved like a hurricane through their attackers. Gruk had dedicated several years to the mastery of the zamra. He used that skill to devastating effect. The Yazirian was jumping, ducking and spinning, bringing the bloody weapon around in wide arcs. An upwards swing slashed opened the thorax of one attacker followed by a downwards arc that relieved another of its head. The sheer numbers of the Klikks worked against them in the face of such ferocious prey.

Gruk received several minor cuts and bruises as the insectoids tried to subdue him. Finally one landed a solid

blow to the raging Yazirian's head. He went down, his scalp laid open. He was back on his feet and swinging in an instant almost completely blind from the blood that covered his grimacing face. He was beaten back down as fast as he rose. Another screeching order resulted in Gruk's arms being secured with the same resin that now held Bladen's arms fast. Gruk was tossed next to the human.

Bladen had malice in his eye as he stared down the leader of this group of Klikks. The leader was smaller than the others and had a lighter coloration to his chitin. He also lacked the raptorial arms of the larger Klikk. In their place were arms ending in manipulators quite similar to that of a Vrusk.

Another screeching order came and the two prisoners were rolled onto their sides. They were being held fast by several of the larger Klikk.

Some sort of amorphous creature was placed on the left side of Bladen's and Gruk's heads. The two cried in pain as the things began bonding with the sides of their faces and inner ears. The agonizing fire seemed to make time freeze. The human was on the verge of passing out when the pain ceased. Bladen was covered in sweat. Gruk's tongue hung out as he was panting uncontrollably hard.

They were yanked up so that each soldier rested on both knees.

"Prey-slave understands now?" asked the leader in a screechy voice.

"I understand that we were attacked without c-," started Bladen. His sentence cut off by a cuff to the head by one of the larger Klikks.

"Close food intake orifice!" ordered the diminutive leader. "You now prey-slave of Those Who Hunt. Those Who Hunt not see prey-slaves like you in back time. Which hunting ground cluster prey-slaves origin?"

As he asked the question, the leader brought out a hand held device. The device was palm-sized. It had an octagonal shape with a low clear dome on one side. He set it on the floor and pressed a button on one of its sides. It projected a three dimensional holographic map of the near portion of the galaxy roughly two meters in the air.

"Which hunting ground cluster prey-slave?"

Two warriors jerked Gruk to his feet and shoved him toward the map. The gore smeared Yazirian bared his teeth and was about to give a defiant response when the ancient device on the pedestal pulsed. And the holo-map winked out.

A quizzical noise came from the leader. He bent down and switched the map on again.

"Now prey-sl-" started the Klikk male. There was a pulse and the holo-projector winked out again. This infuriated the leader. Those Who Hunt needed new prey-slaves to replenish their dwindling supply. He was going to get the information from these two and some old malfunctioning alien light was not going to stop him. He turned and scuttled over to the pedestal. With a swift motion the Klikk knocked the ancient artifact from its perch.

It began to strobe slowly.

Black - There was a terrible bellow straight from the deepest pits of Hades. A stench filled the chamber, fouler than that of a charnel house.

Flash - Gruk fell to the ground like a ragdoll. He was out cold or dead.

Black - The mantis warriors screamed in surprise and then in pain and disbelief. Fear could be heard in their plaintive cries. Bladen thought he was going to wretch from the smell.

Flash - A tentacle held a Klikk's thorax that had separated from its abdomen. Both fountained blood. Bladen started to walk on his knees towards Gruk.

Black - Muzzle flashes could be seen. The reports coupled with the sounds of ricochets echoed through the chamber. Bladen felt and heard a Klikk trip over him. Pain shot through his wounded shoulder as he fell onto it.

Flash - A warrior had jumped. It sailed through the air extending its raptorial arms in front of it like two chitin spears. Bladen's eyes were tearing up from the pain and dust. He blinked rapidly.

Black - Sounds of chitin breaking and flesh rending. Confused commands were being issued.

Flash - The headless body of the Klikk leader stumbled drunkenly into the wall. Bladen saw a glyph of the squid headed dragon covered in blood from where the decapitated body had smeared the wall. His mind was starting to crack.

Black - Savage sounds of struggle could be heard. There was another flash and report from a slug thrower. Bladen's eyes were clearing.

Flash - A mantis warrior was in the grasp of... Bladen caught a glimpse of something. That glimpse was enough to make his bowels empty. It was a walking nightmare. The Cassidinain closed his eyes as his reason and sanity were threatening to leave him. Bladen passed out. The mental shock combined with exhaustion, blood loss and dehydration was too much for the man.

Bladen and Gruk lay as still as the rest of the dead that littered the battleground. How long they lay there, Bladen would never be sure. He was woken by the Yazirian working on his bonds with his feet. One foot held one arm. The other held the zamra.

Yazirians possessed one opposable toe on each foot. This allowed the use of their feet like a second set of hands.

"Glad you could join me maneless," said Gruk as he worked the bonds. "It looks like your restraints were damaged in the battle. I've almost got it off of you."

Bladen's shoulder throbbed with the jostling. The stench was gone replaced by the smell of death. The room was silent except for the sounds of the Yazirian's efforts. Thick dust mixed with blood covered the pair. It had saved their lives. They must have looked like bloody corpses to what ever had dispatched the Klikks.

Bladen's mind was working slowly. He was in bad shape and would probably not last two more days without water. Did he see what he thought he saw or was it some vision brought on by delirium?

Gruk freed him. The human rubbed his wrists and winced in pain as his blood caked shoulder had grown stiff. His left arm was weak almost useless. Bladen took the zamra and went to work on Gruk's bonds.

"Are there any Klikks left?" asked Bladen.

"I doubt it," responded the Yazirian. "I haven't seen one since I became conscious."

They looked around the room. The ancient device was back on its pedestal, slowly throbbing away. The trap had been reset. The broken bodies of the Klikks lay strewn about in pieces. There was not one fully intact corpse among the carnage.

Bladen bent down and grabbed the holo-map projector. "Let's see what we can salvage and get the Hades out of here," he stated.

"Best idea I've heard yet," responded Gruk.

The two systematically swept the room for anything useful. The ascent up the stairs was slow and painful despite their anxiousness to leave. The rest was a blur as the two rushed back along their trail and out of the abattoir.

The heat was overwhelming as the two were hunched over trying to control their breathing. Gruk lowered his sunglasses.

"I think that thing on the side of your head might finally get you some dates," smiled Bladen. "The ladies will love it."

Gruk stared at him. "You stink. Take a sand bath."

"The eggheads are going to have fun with us."

"Thank you gods of Yaz," exclaimed Gruk. The Yazirian pointed with a trembling four jointed finger. He could not contain his excitement. Bladen looked. Across the street sat an armored hovercraft that the Klikks must have used to enter the city.

"You see about figuring out the controls," said the human. "I check for water and food."

"Deal," stated Gruk already moving towards the vehicle.

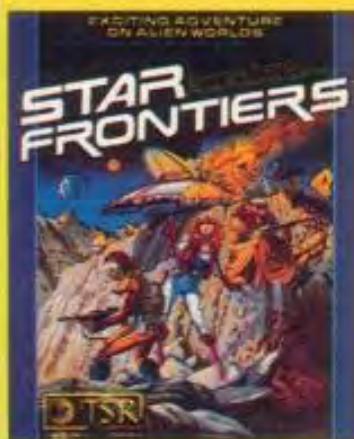
Luck was finally with the two. They had found water enough for weeks and food. Gruk got the hang of the controls after a several minutes of experimentation.

Gruk drove the alien vehicle as fast as it would go. Sand and dust kicked up in their wake. The hellish necropolis was behind them. The extra-dimensional nightmares of the city would infect their dreams for the rest of their lives. They never looked back.

THE END



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