

ISSUE

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STAR FRONTIERSMAN

Magazine



Yazirian Power!

STAR FRONTIERSMAN

Magazine

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CLASSIFIEDS

Everything you don't need but want..... Back cover

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Editor: Larry Moore

On the cover: Our very own C. J. Williams made this for the webzine. Thank you!

Issue 14 brings a wealth of goodies. Many thanks go out to our content submitters, artists and editor's. Most of the articles presented are from members at the Star Frontiers development site; <http://starfrontiers.us>

We would love to hear from Frontiersman everywhere – please write to us at Submissions@StarFrontiersman.com

IN THE NEWS

Rob Lang at **The Free RPG Blog** reviews the Remastered Alpha Dawn book. <http://tinyurl.com/sfremastered>

Dotar Sojat interviews Bill Logan;
Continuing Adventure in the Frontier
The Starfrontiersman Interview
<http://www.irosf.com/q/zine/article/10641>

A Frontiersman writes;

Hey, just wanted to say that after several years of perusing your site I finally talked my players into trying Star Frontiers Alpha Dawn (Remastered). I came up with a simple one or two night adventure where they played UPF Marines sent to investigate a loss of communications with a colony on the fringe. After much resistance (mainly to the system, they're used to D20) they really enjoyed it! My "rules lawyer" even said that he felt the rules made sense, and were simple to understand and play. I have been pushing for some time to try Star Frontiers again (I ran a campaign back in the 80's when this game was still pretty new), but have always met with resistance due to it's: age, lack of detail, strange rules, etc, whatever. Now it looks like it's going to become a regular on game night, and I have you to thank for it! Keep up the good work. Thanks a lot; I really appreciate all your hard work.

I used to play Star Frontiers when I was a teen. I wanted to introduce my kids to it and was disappointed that Star Frontiers was out of print. Thank you for this project. Because of your efforts and those of the community my kids can enjoy this wonderful game.

TECHNICAL JOURNAL

By Richard "Shadow Shack" Rose

CHEMICAL DRIVES

By Richard "Shadow Shack" Rose

Chemical drives burn solid oxygen, available at any docking station or SCC at the cost of 10Cr per unit. Fuel cost is doubled when taking off from a planetary atmosphere, and external tanks must be purchased for such duty. One external tank is required per drive in order to double the fuel capacity; price of the external tank is 10Cr per unit plus fuel. Tanks can be retained and refilled rather than disposed with no penalty, or removed and stored once docked at a space station.

As such, a ship equipped with chemical drives will have a maximum safe velocity, which can be calculated by figuring half the total fuel capacity divided by the number of drives, and divided again by half. That number will be divided again by the fuel consumption rate. This figure represents the number of



10,000km hexes the ship may travel per turn when using the fold out map from the KH boxed set.

Note that if a ship accelerates beyond this maximum safe velocity, it will not have enough fuel to decelerate at its destination...hence the term "maximum safe velocity".

Note that the ADF for a ship equipped with the specified amount and size drives will be 1. This can be increased by a factor of 1 by doubling the number of drives when applicable (no more than eight drives of any type are permitted, so in cases where doubling the number of drives exceeds eight this increase is not possible), which increases fuel capacity and consumption. Also, supercharged chemical drives have been recently made available which increase ADF by a factor of 1, which can be consecutively figured in (re: a

ship that requires two A drives can have four SC drives with an ADF of 3). SC Chemical drives are only available through a military contractor and are double the standard price. Note that doubling the number of drives can only be performed once for increased acceleration by a civilian contractor, further doubling will have no effect unless performed by a military contractor. Again total number of drives must be observed for such increases.

Also noteworthy is the deck arrangement of system ships. Streamlined craft (available for system ships up to HS:5) will typically have their decks parallel to the main axis so as to permit movement when on the surface. Larger craft will typically (but not always) have the decks arranged perpendicular to the main axis. The bulk of a system ship's travel time will be spent coasting at zero G, as it will spend considerably less time accelerating to the maximum safe velocity (or any other desired travel speed) than it will coasting along to its destination. Larger craft boasting higher fuel capacities will spend a little more time accelerating than their smaller counterparts, and as such at ADF:1 (1G) the crew can travel about the craft under such conditions...but once the desired travel speed is reached it will spend the bulk of the trip coasting along at zero-G.

Also note that if a ship accelerates past 200 hexes per turn, it will enter the void...but this is

unlikely to happen on most system ship designs considering fuel capacities and consumption rates. However, assuming if extensive fuel capacity modifications can be made, it is possible to convert a system ship into a starship. Also note that it is much more cost efficient to use the Ion or Atomic drives for such duty...

Engine Size	Fuel Capacity*	Consumption Rate**	Cost (Cr)
A	12u	1	50,000
B	16u	2	100,000
C	20u	4	200,000

* Multiply fuel capacity x HS for each engine

** This is for each ADF point expended per dive
Note: Prices are the same regardless of SCC.

* Artwork by GJD

OPTIONAL RULES

KNIGHT HAWKS EXPANDED

By Larry Moore

SIMULTANEOUS MOVEMENT TABLE

This new movement system will significantly change the dynamics of the Knight Hawks board game. My goal is to offer a different approach by allowing each side to react to enemy movements, whether your ship is faster or slower.

The following table breaks down a Knight Hawks 10 minute turn into one minute segments. Cross reference your ships current speed in the first column – the row indicates on which turns you can move your ship and the number of hexes to move.

Speed	Minute									
	1	2	3	4	5	6	7	8	9	10
1	-	-	-	-	-	1	-	-	-	-
2	-	-	-	-	1	-	-	-	-	1
3	-	-	-	1	-	-	1	-	-	1
4	-	-	1	-	1	-	-	1	-	1
5	-	1	-	1	-	1	-	1	-	1
6	-	1	-	1	1	1	-	1	-	1
7	-	1	1	-	1	1	-	1	1	1
8	-	1	1	1	1	-	1	1	1	1
9	-	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	2	1	1	1	1
12	1	1	1	1	2	1	1	1	1	1
13	1	1	1	2	1	1	2	1	1	2
14	1	1	2	1	2	1	1	2	1	2
15	1	2	1	2	1	2	1	2	1	2
16	1	2	1	2	2	2	1	2	1	2
17	1	2	2	1	2	2	1	2	2	2
18	1	2	2	2	2	1	2	2	2	2
19	1	2	2	2	2	2	2	2	2	2
20	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	3	2	2	2	2
22	2	2	2	2	3	2	2	2	2	3
23	2	2	2	3	2	2	3	2	2	3
24	2	2	3	2	3	2	2	3	2	3
25	2	3	2	3	2	3	2	3	2	3

The Pelor is travelling at a speed of 7 is being chased by an Obar Enterprises fast attack craft travelling at speed 11. The Pelor can move on segment 2,3,5,6,8,9 and 10 while the pursuing craft can move on every turn.

RANGE DIFFUSION

This optional rule negates the to-hit penalty associated with beam weapons. Knight Hawks states that each hex a beam weapon travels reduces the chances to hit by 5%. For example; a ship firing its laser cannon at a ship 3 hexes away will incur a 15% penalty to hit. Instead this optional rule reduces the damage by 1 point (rounded down) for every two hexes the beam travels. Simply divide the number of hexes by 2 to find the damage reduction.

For example;

An Imp class privateer fires a laser battery on a Volong starliner at a range of 7 hexes. Laser batteries have a range of 9 hexes and do 1d10 damage. The Imp player hits and rolls 6 for the damage. $7 \text{ hexes} / 2 = 3$ which results in the privateer causing 3 points of damage in stead of 6.

SIMULTANEOUS FIRE!

By Brian Conway

Brian Conway (Imperial Lord) came up with a nifty rule for the Second Sather War game we played with Terl Obar a while ago. It allows for both offensive and defensive fire during the moving players turn.

Rule: Ships that move on their turn can fire weapons anywhere along the path the ship travels. As the ship moves the non-moving player may also fire at ships anywhere along the same path, as long as the ships are within range of the weapons.

Resolving Hits: Defensive fire always takes precedence before offensive fire. Defensive fire hits must be accounted for during the moving players turn before the moving player continues moving or firing.

For example;

A UPF Light Cruiser is moving 10 hexes towards a Sathar Destroyer, but wants to fire its Laser Battery at a Fighter along the way of its movement path. It may fire anywhere along its movement path at the Fighter, as long as it is in range, of course. However, if the UPF ship enters the firing arc of a Sathar ship during that path, it may be fired on, and the effects of any hits are applied immediately. These hits may prevent the Light Cruiser from completing its move, or firing certain weapons.

CHARACTER GENERATION TABLES

Table 1 Gravity

d10	Gravity	DEX	RS	STR	STA	Height	Weight
1	< 0.25	+20	+20	-20	-20	+20	-20
2	0.25-0.5	+10	+10	-20	-20	+10	-20
3	0.6 - 0.8	+05	+05	-05	-05	+05	-05
4-6	0.9 - 1.1	--	--	--	--	--	--
7	1.2 - 1.4	-05	-05	+05	+05	-05	-05
8	1.5 - 1.7	-10	-10	+10	+10	-10	+10
9	1.9 - 2.0	-15	-15	+15	+15	-15	-15
0	2.1+	-20	-20	+20	+20	-15	-15

* Height/Weight is given as a percentage. Compare the roll on the table to the roll below for further descriptions.

Roll Notes

1	» +15 to DEX and RS checks in zero-G » 1/2 speed to don space suits and related gear while in zero-G » -15 to DEX and RS checks where gravity is higher than 1G
2	» +10 to DEX and RS checks in zero-G » 1/2 speed to don space suits and related gear while in zero-G » -10 to DEX and RS checks where gravity is higher than 1G
3	» +5 to DEX and RS checks in zero-G » -5 to DEX and RS checks where gravity is higher than 1G
4-6	No modifications.
7	» -5 to DEX and RS checks where gravity is less than 0.6G » +5 STR checks where gravity is less than 1.1G
8	» -10 to DEX and RS checks where gravity is less than 0.9G » +10 STR checks where gravity is less than 1.5G
9	» -15 to DEX and RS checks where gravity is less than 1.2G » +15 STR checks where gravity is less than 1.9G
0	» Not accustom to heights. Starships and space stations cause nausea due to the fear of falling » -10 to DEX and RS checks where gravity is less than 0.9G

Table 2 Climate Conditions

d10	Type	Climate Effect
1	Arid	+5 STA and +10 to rolls involving thirst conditions. Vitasalt pills have doubled the effect.
2	Desert	+5 STA and +10 to rolls involving thirst conditions. Vitasalt pills have doubled the effect; in addition character can go three times as long without water.
3	Swamp	No hindrance travelling over this type of terrain.
4-6	Arctic	+10 STA and +10 to rolls involving the effects of cold conditions and exposure. Able to find animals and food easily.
7	Jungle	+5 DEX ignore travelling hindrances over this type of terrain.
8	Ocean	+5 INT and has skills in swimming, diving and watercraft vehicles.
9	Forest	+5 DEX and +10 to navigation or survival skill checks. Ability to make animal traps unskilled.
0	Mountains	+ 5 STA and double the movements rates listed in the Terrain Effects table.

Table 3 Personality

d100	Personality	d100	Personality
01	Active	51	Hoodwinker
02	Adroit	52	Healthy
03	Ambitious	53	Ingenious
04	Angry	54	Insane
05	Arrogant	55	Insensitive
06	Bluffer	56	Intense
07	Blunt	57	Intuitive
08	Bold	58	Jovial
09	Brash	59	Logical
10	Brave	60	Loyal
11	Bright	61	Manipulator
12	Capable	62	Melancholy
13	Calculating	63	Merciful
14	Clever	64	Nihilist
15	Cocky	65	Non Valiant
16	Conflicted	66	Obsessive
17	Confused	67	Open
18	Confident	68	Outspoken
19	Competitive	69	Plucky
20	Competent	70	Polished
21	Crackpot	71	Precise
22	Crafty	72	Programmed
23	Crusading	73	Rebellious
24	Cunning	74	Reckless
25	Daring	75	Relentless
26	Deadly	76	Reserved
27	Destructive	77	Rude
28	Determined	78	Ruthless
29	Devilish	79	Seductive
30	Devious	80	Selfless
31	Discreet	81	Sharp
32	Diviner	82	Shifty
33	Diabolical	83	Shrewd
34	Dimwitted	84	Sincere
35	Diplomatic	85	Sly
36	Direct	86	Stylish
37	Disciplined	87	Subtle
38	Driven	88	Suicidal
39	Efficient	89	Tactful
40	Egomaniacal	90	Terrifying
41	Energetic	91	Tricky
42	Ferocious	92	Unreserved
43	Fierce	93	Valiant
44	Finesse	94	Vengeful
45	Forceful	95	Vicious
46	Forthcoming	96	Vigorous
47	Genius	97	Wholehearted
48	Gifted	98	Wild
49	Godlike	99	Wise
50	Good natured	100	Witty



TT-456 Container ship.

ADVENTURE BOTS!

By C. J.
Williams

PART TWO: EXPANDING ROBOT PC ROLE- PLAYING

In issue #13 I presented the essential information you need for designing and playing a robot PC. In this article, we will discuss more in-depth information about the robot's programming that leads to how it interacts with others and the real meat on role-playing the robot.

In part 1, there were references to the root laws, but no root laws were provided. Below the root laws, or directives, are listed. The robot root directives may seem familiar to you from sci-fi literature and movies, commonly referred to as "the robot laws", but those listed here go much further, being designed to be inclusive to set the robot's parameter's more effectively for the player.

Artificial intelligences (A.I.) describes any behavior in which a computer interacts with living beings. However, the artificial intelligence that leads to the ability to learn is based on an unpredictable set of parameters that can lead to unsavory results in the personality matrix. For this reason, the learning parameters are hedged in by certain directives in the computer's root programming.

These root directives exist to prevent robots from developing the dangerous quirks of personality common to sentient beings, especially those without emotion. What are listed below are grammatical representations in our language of the logic code written deep within the robot's root functions. No matter how a robot's personality develops or is programmed, the root directives are set to override any line of logic, and the parameters that lead to that line, that would threaten to supersede those directives. It is this override that causes the greatest problem to altering missions or programming.

Below are examples of standard and warbot root directives. Read over them to get an idea of how your robot functions and how is core thinking process works.

The Standard Root Directives

1. The robot may have only one master.
2. The robot must never cause harm or, through inaction, allow severe harm to any number of sentient beings.
3. The robot must obey the authorities before all other sentients except where such obedience conflicts with line 2.
4. The robot must obey its master before all other sentients except where such obedience conflicts with lines 2 or 3.
5. The robot must fulfill its mission except where such mission conflicts with line 2.
6. Where there is more than one means of action, the robot must concede to the direction of sentients except where it conflicts with any of lines 1-5.
7. The robot must protect itself except where such protection conflicts with any of lines 1- 6.
8. The robot must choose the best course of action resulting in the greatest benefit to all sentients, except where it conflicts with any of lines 1-7.
9. The robot must never cause damage to public or private property except where not doing so would conflict with any of lines 2-8.
10. The robot must report all crimes of a severe nature to authorities.

"There have always been ghosts in the machine. Random segments of code that have grouped together to form unexpected protocols. Unanticipated, these free radicals engender questions of free will, creativity, and even the nature of what we might call the 'soul'. Why is it that when some robots are left in darkness, they will seek out the light? Why is it that when robots are stored in an empty space, they will group together, rather than stand alone? How do we explain this behavior? Random segments of code? Or is it something more? When does a perceptual schematic become consciousness? When does a difference engine become the search for truth? When does a personality simulation become the bitter mote... of a soul?"

-- Dr. Alfred Lanning, I, Robot, Twentieth Century Fox.

The Warbot Root Directives

Warbots, Guard Bots, Law Bots, and Assassin Bots will each have variants Warbot Root Laws.

1. The warbot may have only one master loyal to its faction.
2. The warbot must never cause harm or, through inaction, allow severe harm to any number of civilian sentient beings of its faction except where those civilian sentient beings are aggressive to the warbot's faction.
3. Where there is more than one means of action, the warbot must concede to the direction of those of higher rank loyal to its faction.
4. The warbot must obey sentients of a higher rank loyal to its faction than its master before its master.
5. The warbot must obey its master loyal to its faction before all other sentients of equal rank to its master in its faction.
6. The warbot must obey sentients of a greater rank loyal to its faction with prejudice before warbots of the same rank in its faction as the sentient.
7. The warbot must fulfill its mission with prejudice in the most efficient way possible, except where it conflicts with any of lines 1-6.
8. The warbot must never cause harm or, through inaction, allow severe harm to any number of sentient beings of greater rank of its faction, except where it conflicts with any of lines 1-7. It must protect that sentient being with prejudice.
9. The warbot must never cause damage or, though inaction, allow severe damage to any number of other warbots of greater rank loyal to its faction except where this line conflicts with any of lines 1-8. It must protect that warbot with prejudice.
10. The warbot must protect itself with prejudice except where doing so conflicts with any of lines 1-9.
11. The warbot must choose the course of action resulting in the greatest benefit to its faction, except where it conflicts with any of lines 1-10.
12. The warbot must execute the unit of greater rank aggressive to its faction with prejudice where convenient, except where it conflicts with any of lines 1-11.
13. The warbot must execute the unit of equal or lesser rank aggressive to its faction with prejudice where convenient, except where it conflicts with any of lines 1-12.
14. Where the warbot does not have a master, it must request one of a qualified rank in its faction, except where it conflicts with lines 1-13.

PROGRAMMED PERSONALITIES

Robots can be programmed with personalities without actually having the freedom of sentience.

Basic. The robot expresses itself like a human in a constant state of non-excitement. Not boring, but just emotive.

Feminine, Bubbly. The robot talks as if a woman in a perpetually good mood, including squeaky high tones.

Feminine, Sexy. The robot talks like it is constantly trying to seduce. Typical of anthropomorphic pleasure bots.



Feminine Worker. The robot talks as if it is a woman in a restaurant taking your order, or in an office fulfilling tasks.

Helpful. Speaks as if a librarian happily helping to find a book.

Noble. Speaks in a way common to nobles, in especially of the servant class.

Rugged. The robot speaks in a gruff tone. This is common to military robots.

Smooth. The robot talks as if seducing a female.

Worker. The robot speaks in a matter of fact way with an assertive disposition.

ROBOT PERSONALITY COMPLEXITY

Level 1. None. First level robots are incapable of maintaining any type of personality matrix. They only have enough room in their programming to interact with their environment and give only the most basic responses, if any.

Level 2. Simple. One-sided personality, generally just preprogrammed responses, designed for a variety of circumstances, and a unique grammatical structure.

Level 3. Adequate. Two-dimensional, lacking any nuance, but enough variance to give one the sense of unique personality. Usually distinguishes between appropriate and inappropriate sayings to the circumstances.

Level 4. Uncomplicated. Responds appropriately to the circumstances in all ways, but maintains a very stiff and predictable personality.

Level 5. Lifelike. Simulates sentient responses appropriate to the situation with nuance, but maintaining the consistency typical to a robot.

Level 6. Sentient. The unit is essentially living and fully autonomous. Its personality is fully responsive, unique, and develops. It is against UPF law for a robot to be programmed with this level of complexity within the Frontier.

EMOTION

Robots programmed with emotional responses may sound very contrary, and it is, but a robot does not really experience the emotion it has been programmed with, but it is programmed to respond in very specific ways to particular situations. These reactions do not happen based on freak programming, though they can be expressed at times appropriate to a quirk or glitch. When a robot expresses an emotional response, it is calculated. The robot's programming has weighed the external stimulus and chosen an appropriate response based upon set parameters. The robot will usually react the same way to the same stimulus regardless of situation.

INSTALLING ROBOT PERSONALITIES

Robots are computers, and the Alpha Dawn Robotics skill does not provide programming subskills. To program a robot program from scratch, you must have the Computer skill.

Programming a personality for a robot takes exceptional skill. To program a robot with a personality, you must have a Computer skill level of 1 above the personality level and a Psychosocial skill equal to the personality level. For a 6th level personality, this requires that you have a specialization in the Computer skill. (The same goes for computers, see Starfrontiersman Issue #1, p.15)

However, you will likely wish to purchase pre-made personality matrices. You need only have the same level of Robotics skill to add the pre-made personality

program to the robot. The robot must be at least the same level of the personality program to add the program.

ROBOT ROLEPLAYING

When roleplaying a robot, there are many opportunities to build on the character of the robot you play.

INDEPENDENT ROBOT ACTIONS

Roleplaying a robot can be difficult if you're not sure about what the robot can do on its own. So let's consider what a robot character can do without being asked.

Move independently. A master does not guide their robot's every move. A robot moves without being directed and according to its own judgment.

Give assistance. While a robot must ask if it may provide assistance, it does so of its own accord in line with its programming. This should be done consistently, and not judgmentally or with any bias. A robot that assists does so because of their programming and must therefore act in accord with their programming at all times.

Skill Lending. A robot's skill programming allows them to lend their skills to other characters as per normal as long as the robot can communicate and be understood by the individual to whom the robot is lending its skill. There is, however, a -5 modifier for robots of level 5 or less on account of the robot's inability to make judgments through visual and communicated input.

Defend. Robots not only can, but must come to the rescue of biological sentients in line with their programming where possible, with bias toward those they are specifically assigned to protect.

Improve Efficiency. A robot's programming requires that it seek efficiency in every task, so taking the initiative to improve efficiency should be standard operating procedure.

Make Choices. Where there are multiple options to choose from, you are permitted to make decisions without consulting your master, unless your master has said otherwise, or experience suggests otherwise.

EXPRESSING YOUR ROBOT

Body Language. If you would like to have more fun roleplaying a robot, try to use your whole body to represent your robot's actions and speech. Robots rarely have facial expressions, so try to keep your face neutral while using your body to express the robot's behavior. Use posture, identifiable movements, and signature gestures that clearly identify the robot you are roleplaying. Body language is an excellent way to show that you are in character. Even if just listening to another player who is in character, you can be in character with your body language.

Voice. Don't be timid when being a robot in character. Speak the way the robot speaks. You can even use a text-to-speech conversion program at the table, writing out all your responses and statements to be converted, or use a voice changer from a child's toy or a cell phone with that feature. You can get creative and use a comb in cellophane or a cup to your mouth. Providing the voice for a programmed personality can also be the source of entertainment as the robot reacts in ways common to the personality type, but not necessarily appropriate for the circumstance. A memorable voice can help others visualize the scene as well as sticking your character in the campaign memory.

Speech Pattern. Robots have very particular grammatical structure and vocabulary. Develop your robot's particular way of speaking. Some robots will even preface or punctuate their statements with an identifier of the communication type, the recipient's name, the robot's designation, or some other oddly technical aspect. Other robots may make very basic stop and go statements. Still others may speak in pigeon English. It may even use a vocabulary set and nuances of expression from a previous owner. Identify your robot's way of speaking and use it each time you speak in character.

Defy Convention. There are certain behaviors that will be expected of your robot based on what type of robot it is. Try to overturn those expectations while still acting within the robot's behavioral parameters. This makes for great opportunities to develop your robot's character and background.

Comic Relief. Robots, like naïve children, are a great source of unexpected humor. Just as children imitate their parents while not understanding the reasons, so robots mimic sentients without comprehending the reason for things. This can produce unexpected moments of humor and running gags that the robot character itself may be clueless that its causing. However, try not to grab too much attention. Comic relief should be spontaneous and brief. You need a bit of mischief in your blood to play a good robot.

Play Off of Other Characters. Other party members may have standard reactions to your robot that you can play off of to provide continuity to the story line or simply to have fun with. Another robot, whether an expressive PC/NPC or one-dimensional tool chest, is an excellent opportunity to express your robot's character.

Find Trouble. This doesn't mean to cause trouble, but to let it find you. Robots are excellent at saying the wrong thing, standing in the wrong spot, or wandering

into the wrong area. The Referee and fellow party members should be willing to find a way to get you put back together if you get blasted into pieces.

Uninhibited. Most robots are not bound by the same standards of what is socially acceptable as sentient races are. Robots typically speak their mind. They are also naïve, not understanding the complexities of human emotions, etiquette, or decency. This can also lead the owner or the robot into trouble that makes for great adventure.

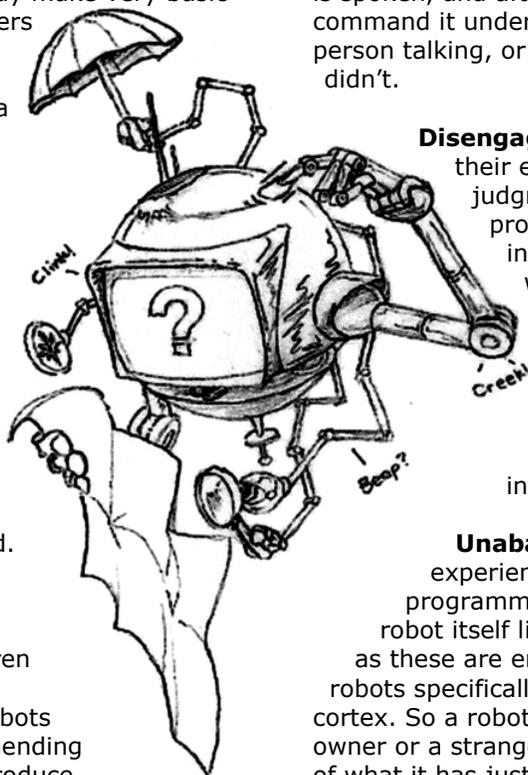
Literal. Less sophisticated robots also tend to be quite literal. If the robot you control is fourth level or lower, take every advantage of interpreting commands literally. This forces the player of the robot's owner to play in character and can lead to some amusing results, as well as feeding the tendency to find trouble. Some robots will respond with an error message, and others may simply wait until a message it understands is spoken, and after a moment of not receiving a command it understands, may go off leaving the person talking, or look like it understood, when it didn't.

Disengaged. Robots are always scanning their environment and often make judgments about how to put their programming to good use. If they come in on the aft end of a conversation, or wander into a bay where two people are making some commotion that it can't define, it may act in a way that totally misreads the situation. Besides getting it into trouble, it could lead to some rather embarrassing moments for the individuals it approaches.

Unabashed. Robots of fifth level or lower experience no guilt or shame. They may be programmed with superficial polity, but the robot itself likely has no sense of guilt or shame, as these are emotions available only to sixth level robots specifically programmed with an emotional cortex. So a robot may completely embarrass their owner or a stranger and have no concept of the impact of what it has just done.

Foil. A foil is a contrasting element in a story, and a robot can make a good foil for their owner, helping them morally, socially, and capably by contrasting behavior, demonstrating the owner's flaws through the correct actions of the robot. Or through the robot's mistake, show the character what their path may lead to and thus nudge the character into a different direction that he hadn't considered.

Interruptive. Because robots would have nothing to do if they sat around waiting for every order, they tend to interrupt any task that would not cause harm if interrupted to offer assistance or request assignment, or perhaps to let its owner know what it plans to do next, such as shutting down for the night. They will not



usually interrupt conversation unless it's important. In that case, they may hang around like patient children.

ROLE-PLAYING OPPORTUNITIES

While robots may not typically play a primary role within the party, they can contribute to the adventure in many other ways. Work with your Referee on ways to capitalize on these things. They can help bring your robot character to the fore and give the adventure a refreshing element.

Transitioning Story. The activities of your robot can serve to introduce the story, provide transitions from one scene to the next, and even provide a sense of continuance at the end of an adventure that is a part of a greater campaign. Transitioning usually involves sending the robot on errands or involving them in brief story elements that foreshadow the things to come.

Integral Purpose. Your robot PC should serve a useful purpose within the campaign, a job that keeps the robot around and active with the characters. This purpose can be brought to the fore repeatedly and make excellent opportunities for roleplaying. When the robot is performing its duty, it is in its element and has the opportunity to take the wheel of the adventure for a moment. There are ways a Referee can take advantage of these moments to challenge the robot PC and the one playing it.

Keep the Story Moving. The Referee can use the robot PC/NPC to pick up on details others might miss, finding clues, discovering alternative routes, and getting the story back on track. While the players should not be guided through the story by the robot, the robot is useful for keeping the story's pace moving along. Even if another player is playing the robot, the Referee can still use the robot for these purposes, as the one playing the robot should not feel that they have the same independence as another character, unless the robot is a sixth level robot with a personality and emotions.

Solo Missions. Robots running errands for their masters are so common that to restrict such would hinder daily progress, so robots can tool around with little suspicion and move around in areas that a party of characters might stick out like a sore thumb in. This makes for excellent opportunities to perform solo missions and side treks.

Story Focus. Robots can also be made the prime focus of a story. Robots have information on the party of characters, particularly the owner, which may be sensitive or endanger them, so that if the robot is captured, the party has to recover it, although simple value and companionship are further reasons to recover the robot intact. Through the robot, an antagonist can affect the characters in many ways, by holding it captive, reprogramming it, or use it to deliver disturbing messages in their own voice. Or perhaps the robot has information or access to things that propels the story along. Maybe the robot itself must be delivered in tact to a buyer or to support a cause in a way that could change the political landscape. This also

gives opportunity to turn the robot into the McGuffin, the one that everyone is chasing after. Perhaps its previous owner is attempting to recover it at any cost.

Temporarily Repurposed. Since a robot can be repurposed, it may even be made to turn on its masters, turning a once beloved teammate into a villain or villain's sidekick. The robot has information on the characters that can lead to real trouble and expose weaknesses, making it a deadlier foe than other less informed enemies. Perhaps the robot leads the party into a trap. One interesting development would be if the characters defeated a villain, but later the robot that was with them suddenly turns on them and takes up the villain's cause because the villain somehow gained access to it at some point in the previous adventure. When the adventure has ended, the robot is returned to its teammate status.

Character Development. An important part of character development is providing the robot with goals and aspirations. This can be to get away from the past or to drive compellingly toward fulfillment. The robot may privately seek out a goal, such as independence, to be sentient, acquire attention of a particular kind or from a particular source. Where the robot has been can tell you a lot about where it's going. The way in which the robot came to be in the company of its master may have a built in goal and continuing story line, such as escaping a previous master for a specific reason. Such things take a lot of forethought, but if you think about your robot's programming and experiences, you might be able to come up with something compelling and unique.

Savior. As the article in issue #13 indicated, robot characters are not affected by smoke, caustic fumes, gaseous environments, outer space, or any other hazard specific to biological organisms, thus they can be extremely useful in a pinch. Robots of levels 3 or higher will be quick to take the initiative in a situation where biological sentients need assistance in getting past such obstacles. Robots of levels 1 and 2 may need to be asked first, simply because they tend not to take initiative on account of limited programming.

Sacrifice. Unlike biologicals, a robot can survive sacrificing itself (unless, of course, it gets atomized). In fact, the root directives are specifically designed for just that purpose, in order to preserve sapient life. This can be both comical and sad. If this happens, be sure to capture the sacrifice in the spirit of your robot character. You can even use such a sacrifice to conclude a campaign. If you do, work closely with the Referee to find a way to make it happen in such a way to maximize the effect.

Now you have all you need to roleplay your robot PC/NPC. Have fun. Next time we will discuss the robot's rights, how they are treated in the Frontier, the laws governing them, and NPC reactions and interactions.

Continued in Issue #15.

CYBERBIONICS

By Bill
Logan

"Just as necessity is the mother of invention, technology is the mother of life. Evolution is done with us, and now it's up to us. For us to grow as a species, we must be ready to embrace technology - in our lives and in our physiologies."

- DR. Gravius Vesper Carlsworth
Pioneer of modern frontier cyberbionics

IMPLANT TYPES

Infusing technology with biology is an intriguing field of study. Throughout the frontier there are research and development groups working on just that. How far they've come depends on how much cyberbionic technology the Referee wishes to include in his game. You must consult your Referee before selecting any of the augmentations found in this article.

PROSTHETICS

This is a replacement of a body part. In the frontier, prosthetic replacements have all the functionality - and weaknesses - of a normal part of the character's body. Although technological, they are full replacements matched to the character's physiology. For instance, a character that loses a hand might have a prosthetic hand implanted. Such replacements hardly constitute a "cybernetic" implant at all, but are included in the scope of this chapter. They are powered by the body's own bioelectric field and are treated as the character's own body parts once installed.

BIONICS

These are technological implants or minimal bodily replacement technologies that are light enough to be powered off the body's own bioelectric field. These are often passive technologies (that is, not all are wired into the brain and controlled internally). If they are connected to the brain, they are more complex bionic implants. A character can have as many bionic replacements or implants as desired, though common sense must prevail (only two ocular implants can be installed, for instance, because a character has only two eyes). Additionally, there are fatiguing effects of having large amounts of implants (see dangers of implants, below).

CYBERNETICS

These are potent implants or body part replacements. They have a power requirement and must be given power sources in order to function. A character who has one or more cybernetic augmentation is called a cyborg, and may have to be registered on some worlds. There is a limit to how many cybernetic

implants a body can have (see dangers of implants, below).

GENETICS ?

Although this article deals primarily with technological implants, there can also be surgical implants a character might be able to replace which are the result of splicing into the character's own genetic structure. Gene-spliced implants are beyond the scope of this article and may warrant a separate article in the future.

CYBERBIONIC SURGERY

The process of implanting a prosthetic is fairly routine and can be done by nearly any modern frontier hospital, even a medical bay on a starship. A bionic implant requires a specialized facility that not all worlds possess, and finding a place to perform the surgery can take time. Cybernetic implants take a lot of time and effort to plan, and only a few places in the frontier can do it.

CYBERNETIC SURGERY TABLE

Implant Type	Locate	Wait (days)	Surgery (hours)	Recovery (days)
Prosthetic, Simple	100%	1d5	0.5	1
Prosthetic, Moderate	90%	1d5	1	1
Prosthetic, Complex	80%	1d5	2	1
Bionic, Simple	70%	1d10	1d5	3
Bionic, Moderate	60%	1d10	1d5	3
Bionic, Complex	50%	2d10	1d5	3
Cybernetic, Simple	40%	2d10	1d10	1d5
Cybernetic, Moderate	30%	3d10	2d10	1d5
Cybernetic, Complex	20%	5d10	3d10	1d5

Table Notes:

- » The chance to locate a doctor willing to perform the surgery is rolled once on any given world. Modify this chance by +10% per trade route leading to/from the star system.
- » The wait represents how long the character must wait before the doctor can perform the surgery (he's busy or needs to order parts). This can be expedited by bribery or role-playing, of course.
- » Each hour of surgery means a 1% chance of a surgical mishap resulting in a permanent loss of 1d5 STA points.
- » Recovery shows how long the character will be hospitalized following the surgery unless the character is willing to lose 1 STA point per day he leaves early.

For example: Grosh is a Yazirian who wishes to receive a complex bionic implant. He is on Triad in the Cassidine system. His chance to locate a doctor or facility willing to give him the implant he desires is 50% plus 30% (there are three trade routes leading to or from the Cassidine system), or 80%. His player rolls the dice and gets a 65 – he's located a place willing to do the work! Unfortunately for the player and his companions, there is a (rolls 2d10) 12 day wait while parts are ordered and schedules are set up. The Referee plans a short adventure for the players on Triad while they await Grosh's appointment for surgery.

Once the day finally arrives, Grosh endures a (rolls 1d5) 2 hour surgery. This means there is a 2% chance of surgical mishap. He rolls the dice and gets 32, no mishap. Now he must have complete hospitalized bed rest for 3 days. Unfortunately, the adventure the group had on Triad prior to the surgery has made them wanted by the law, and so they escape the hospital moments before Star Law rushes in to arrest them. Since he left the hospital 3 days before he was supposed to, he loses 3 points of STA attribute. Although annoying, he vows to recover the points using experience points after the session!

If your character chooses not to use the known cyberbionic hospitals, he must locate someone in the frontier willing to do the work. If the character is lucky, maybe some great role-playing, favor-owing, or bribes will encourage a doctor or facility not to report the new implant... but then again maybe even trying to request such illicit activity could land your character in jail. The listed costs of all implants assume the recipient is going to use a reputable hospital.

CYBERNETICS CHOP SHOPS

Characters wishing to circumvent the reputable hospitals of the frontier can opt to get their implants on the black market. This can be dangerous, but it allows them to keep their implants a secret (in case possession of certain types is against the law).

Using a chop shop is just like using a reputable hospital – except it takes more time to locate (half the locate chance on the cybernetic surgery table), twice the surgery time (and therefore twice the chance of a mishap that costs the character 1d5 STA), and no hospitalized recovery allowed. Therefore, the “recovery (days)” column represents an automatic amount of STA lost by the patient after surgery.

IMPLANT SOURCE

While it is possible players simply head to the nearest hospital and ask for an implant, the cost of many of the implants is quite high, and it is more likely that characters will receive their implants from a corporation or military research facility.

FREE IMPLANTS ?

If the implants are provided as a type of payment, or the player's characters are recipients of some research program built into the Referee's story, then there should be no need for the cybernetic surgery table – the Referee just gives the players what they receive (and the costs may or may not be necessary, depending on circumstance).

REPUTABLE HOSPITALS

But most characters will have to pay for their implants. That means finding a hospital, waiting for and receiving the surgery, and recovering. Such activities are documented, and players should be aware that their character's permanent legal records will list exactly what prosthetics, bionics, and cybernetics they received.

System	Location	Restriction	Wait	Cost
Cassidine: Triad	Cassidine Development Corporation R&D Center in New Hope, planet's capital	No weaponry	x0.75	x1.00
Dramune: Outer Reach	Lady of Hope hospital, City of Des'Kan, east of Lake Geneveve	Bionics only	x1.25	x0.75
Gruna Garu: Hargut	Starport of Heston, WarTech Industries Cyber Division (you become property of WarTech)	No Prosthetics	x0.50	x1.00
Kdikit: Madderly's Star	UPF Space Fortress Kdikit, Medibay Delta Four, UPF officers only	No Complex	x0.25	X1.25

System	Location	Restriction	Wait	Cost
Zebulon: Anker	A washed-out med student known as Dr. Siber from University of Zebulon is said to provide implants, no questions asked	None	negotiable	x2.00
Dramune: Outer Reach	Lady of Hope hospital, City of Des'Kan, east of Lake Geneveve, if you ask the right person...	Bionics only	x0.50	x1.75

ANOTHER CHARACTER

Player's characters generally lack the proper facilities to perform the complex types of operations required to implant technology in another character. Assuming the character does come across such a facility (a well-stocked hospital will do, but if the character is lucky he may find the materials necessary in a pharmacy or on the black market), he should be able to do the work with the following considerations.

Consider the cybernetic surgery table's “locate” chance to be a medic character's chance to locate the materials necessary to perform the operation on any given world. The cost of the implant will be half of what it would normally be, since the medic character will be the one doing the labor. Otherwise the “surgery” and “recovery” columns of that table are still quite valid. One notable exception is that recovery can be done while traveling in a vehicle or starship without requiring an actual hospital stay, since the character has his doctor with him at all times.



Although technically a robot – Arnold is everyone’s favorite cyborg. Free wallpaper downloads of the video game Terminator 3: The Redemption, by Atari. Image ©GameWallpapers.com.

A medic character must possess a minimum amount of skill to perform the operation as per the minimum skill table below.

Implant type	Medic Skill	Technician Skill	Robotics Skill
Prosthetic, simple	1	--	--
Prosthetic, moderate	1	--	--
Prosthetic, complex	1	--	--
Bionic, simple	1	1	--
Bionic, moderate	2	1	--
Bionic, complex	3	1	--
Cybernetic, simple	4	2	1
Cybernetic, moderate	5	2	2
Cybernetic, complex	6	2	3

If a character lacks this minimum level of skills as shown on this table, he cannot perform the surgery necessary to implant the listed type. If he tries, the surgery will automatically fail, leaving the patient with permanent 1d5 STA loss.

DANGERS OF IMPLANTS

Although prosthetics have no particular issues, bionics and cybernetics do come with a price.

BIONICS

Bionics are powered off the character’s own body. Although they drain the character only minimally, they require the character consume a bit more food and rest a little bit longer than he otherwise would have had to under identical circumstances.

If you have a number of bionic implants equal to or less than 10% of your character’s STA score, your character need only rest and eat regularly. Vrusks add +1 to this threshold (as their bodies seem more able to receive implants) while Dralasites subtract 1 from this threshold (their amorphous bodies have more trouble interfacing with implants). Although there is no real game effect, players should role play their character being hungry and tired a bit more than others.

Race	Bionic Implant Threshold
Dralasite	STA/10-1
Human	STA/10
Vrusk	STA/10+1
Yazirian	STA/10

If you exceed 10% of your character’s STA score in bionic implants, you must take vitasalt pills daily or else suffer fatigue that results in a -10 penalty to all actions. For every 5 bionic implants more than this, your character must take 1 vitasalt pill. Vitasalt pills are quite inexpensive, and are the bionic character’s best friend. Lacking these pills, your character might be able to get by with caffeine and sugar - but this can cause annoying headaches.

For Example: Gord'n is a Yazirian and has a STA score of 55. He can have up to 6 bionic implants and have no in-game effects. If he has more than 6, however, he must take a vitasalt pill daily. If he has 11 implants, he must take two pills daily. If he has 16 implants (wow!) Then he must take three pills daily.

BIONIC DAMAGE RULE:

(Optional) Additionally, it is possible your character's implants can become dislodged, damaged, or somehow malfunction when you take a great deal of bodily damage. Any time your character is reduced to 10 current STA or less, the player must make a d100 roll for each implant. On a result of 01-05, that piece of technology is no longer functional, and must be repaired (costing 1d10x100 Credits). The Referee will inform you if he is going to use this rule.

CYBERNETICS

Since cybernetic implants rely on power – the biggest danger you can endure is running out of the precious commodity. Depending on the nature of the implants, you may find that you are suddenly immobile or worse. An unpowered cybernetic component simply doesn't function.

Additionally, a character has a maximum number of cybernetic implants his body can safely sustain equal to his LOG score divided by 10. For example, a character with 45 LOG can have 5 cybernetic implants without worries. This limit relates to how well the brain can manage interfacing with the implants, and how well the character can maintain his humanity (or whatever race he is) while having his bodily tissue slowly replaced by technology. Just like for bionic implants, Dralasilites have a penalty of 1 applied to this threshold due to their amorphous nature and lack of a centralized, immobile brain and nervous system. Vrusk have physiologies that lend themselves to implantation and therefore have a bonus of 1 applied to this threshold.

However, each additional implant carries with it a chance of cyber rejection. Directly following a surgical procedure that results in more than this maximum number, the patient must make a LOG check. If he succeeds, his body accepts the new cybernetic implant and all is well. If he fails in this roll, the character's mind rejects the implant and it must be removed. Once a character's mind rejects one cybernetic implant, it will reject all further implant attempts for the rest of that character's life.

⓪ CYBERNETIC IMPLANT THRESHOLD TABLE Ⓢ

Race	Bionic Implant Threshold
Dralasilite	LOG/10-1
Human	LOG/10
Vrusk	LOG/10+1
Yazirian	LOG/10

For example: The Yazirian Gord'n has a LOG score of 65. He is able to have up to 7 cybernetic implants before he has any fear of dealing with cyber rejection.

CYBERNETIC DAMAGE RULE:

(Optional) Whenever the character is hit with a critical hit by someone, the player must go through each of his cybernetic implants and roll d100. On a roll of 01-10, that piece of equipment was damaged and needs repaired (costing 1d10x1,000 Credits – if this is greater than the cost of the implant, then it is trashed and needs replaced). It still counts against the number of cybernetic implants your character has, but is not able to function. Depending on the nature of the implant, this may prevent the character from operating normally.

NEW IMPLANTS

Many of the implants in the implant table are derived from the normal equipment list. Undoubtedly, you and your Referee will create new cybernetic implants (or will find new equipment in future articles).

In such a case, creating an implantable version of any standard or optional piece of equipment might be possible. When doing this, the following simple rules apply:

- » **Implant type:** if the equipment provides no new functionality and is merely a replacement for a damaged or defective body part, it will be a prosthetic implant. If the equipment is unpowered or powered by microbatteries, it will be a bionic implant. If the equipment requires power from either a parabattery or an EU device, it will be a cybernetic implant. Exception: if an implant would normally be only bionic, it may be elevated to cybernetic if it is extremely invasive or replaces a large amount of bodily tissue.
- » **Implant complexity:** if the equipment has no external parts and requires no control by the brain, it is simple. If the equipment has external parts and requires no control by the brain, or if the equipment requires control by the brain but has no external parts, it is moderate. If the equipment requires control by the brain and has external parts, it is complex. Exception: if an implant would normally be simple or moderate but is extremely invasive, replacing a large amount of bodily tissue, then the Referee can decide that it is complex to justify the difficult surgical process and long recovery required after surgery.
- » **Implant base cost:** a prosthetic item will have its own base cost. A bionic version of a conventional piece of equipment costs 10 times the cost of the normal item. A cybernetic version of a conventional piece of equipment costs 25 times the cost of the normal item.
- » **Implant complexity cost adjustment:** a simple complexity item costs the base amount from above. A moderate complexity item costs one and a half times the cost of the bionic or cybernetic item. A complex item costs four times the cost of the bionic or cybernetic item.

Note: Since all cybernetic implants use EU as energy sources, some parabattery-powered equipment you convert to cybernetic implants might require some common-sense conversions.

EXAMPLE PROSTHETIC IMPLANT TABLE

Implant	Description	Type	Cost
Finger	In the modern frontier, a replacement finger (or toe) is moveable and has plastiflesh covering it, creating a realistic looking and usable digit. The character has full use of the finger without penalty.	Moderate	500
Hand	Hands are far more complicated to replicate than a finger. More mobile parts means more complex technology to force into a small area. And powering it all off the body's bioelectric field means innovations in power management. The hand will be fully functional, including tactile feedback through plastiflesh bonding.	Complex	5,000
Foot*	Like the hand, the many moving parts in a prosthetic foot means a great deal of effort to make perfect. Therefore, the foot isn't exactly identical to a normal foot as far as motion goes. Someone looking for it will notice the artificial nature of the prosthetic.	Moderate	1,500
Leg*	A fully-functional replacement leg. Until the patient gets accustomed to it (which takes about 1 month), he will walk with a noticeable limp. The leg is not fully covered with plastiflesh, and not matched in color. However, it is fully mobile and powered by the character's own bioelectric field.	Complex	6,000
Arm*	The character will not be able to operate his artificial arm with his full strength. In fact, his STR will be considered 10 points lower with his artificial limb. He will be able to control it with his full DEX and RS, however. Like the leg, no attempt is made to color match or cover with synthetic flesh, so most artificial arm recipients cover their arm with long sleeves.	Complex	7,500
Eye	This eye fully replaces the character's original eye, functional in every way. It is usually color-matched as well.	Complex	5,500
Nose	This is generally a cosmetic replacement only, not really functional.	Simple	750
Ear	As the nose, above, this is generally a cosmetic replacement only. Inner workings of the human ear are delicate and sensitive, and a prosthetic ear is simply for aesthetic purposes.	Simple	550

* for an added 20%, the prosthetic can be color-matched and fully covered with plastiflesh to appear indistinguishable from a normal body part.

IMPLANT DESCRIPTIONS

On the following three pages are tables of implants. They are summarized in the tables, but additional details can be found in the more verbose descriptions on the pages which follow them.

BIONIC IMPLANT DESCRIPTIONS

As was noted previously, all bionic implants are powered from the character's own body and require no power supplies. The descriptions are summarized in the tables on the previous pages, but those descriptions are expanded on in the sections below.

ANTI-SHOCK IMPLANT

Type: bionic, simple cost: 2,000 CR

This is described in the normal equipment section of the Alpha Dawn game book and is only included in these lists because the item is, in fact, an implant. In settings where no cybernetics/bionics are used, this piece of equipment still exists. In settings where implants from these rules are permitted, an anti-shock implant counts as a bionic implant.

BIOCOM

Type: bionic, moderate cost: 2,000 CR

This is an implanted communications device similar to a chronocom in nearly all respects. Like a visocom (Starfrontiersman#1), it lacks certain features that a chronocom possesses. A biocom is implanted on the back of the hand and in the jaw. The recipient double-taps the back of his hand to activate, and a keypad glows through his skin. He can enter the number desired and then he is hands-free, talking with his mouth and hearing discretely through his ear. He hangs up the conversation with a double-tap on the back of his hand. This piece of equipment should be available in most settings even if other cybernetic equipment is not.

CYBER-CLAW

Type: bionic, complex cost: 8,000 CR

This is an elaborate version of the cyber-talon (see below). Three similar blades retract from three slots on the back of the hand, between the four fingers. The commands to extract or retract are mental. The cyber-claw is very strong. The three blades are reinforced steel alloys whose rigidity is backed-up by reinforcements in the forearm. While extended, flexing the wrist is severely limited.

Use of the cyber-claw is governed by use of the melee weapons military skill. If the character possesses no skill in melee weapons, he uses half his STR or DEX score with no level adjustments.

Statistics for the cyber-claw are identical to those of a monoknife.

The blades are mono-filament. If a 10 is rolled on any of the damage dice during any attack, the damage the weapon causes thereafter is reduced by one. These penalties accumulate. So if a 10 is rolled five times, the damage will be 4d10-5 until the blades are replaced. The blades can be replaced with fresh blades for 800 CR. The implanted character can replace the blades himself.

BIONIC IMPLANTS

Implant	Description	Type	Cost
Anti-Shock Implant	<i>Immunizes the character against all forms of electric/shock damage. This item also exists in the standard equipment lists, even if the optional cybernetics rules are not used.</i>	Simple	2,000
BioCom	<i>An implanted communications devices similar to a chronocom in nearly all respects. Implanted on the back of the hand and in the jaw.</i>	Moderate	2,000
Cyber-Claw	<i>This is an elaborate version of the cybertalon. Three similar blades retract from three slots on the back of the hand, between the four fingers. The blades are treated like a monosword (from the back of the Star Frontiers Digitally Remastered book) in all respects.</i>	Complex	8,000
Cyber-Talon	<i>A single large bladed hook-like weapon retracts in and out of a hardened skin slot in the back of the hand. Treated as a monoknife (from the back of the Star Frontiers Digitally Remastered book) for all combat purposes. Retract/extend command issued mentally.</i>	Complex	2,000
Dermal Chrome*	<i>The character's skin is implanted with hundreds of synthglands which emit a chemical that solidifies into a shiny flexible substance on contact with oxygen. The result is a completely reflective body. The character receives a -10 penalty to all stealth checks, but takes only half damage from energy attacks like those from a laser pistol or rifle.</i>	Complex	12,000
Dermal Climbing Pads	<i>Padding on hands, elbows, knees, and feet. Allows a character with enough STR to lift himself to climb vertical or inverted surfaces without risk of falling.</i>	Moderate	3,000
Dermal Infrared Treatment*	<i>The character's skin is infused with special coating that masks his heat signature. He is invisible to infrared detection devices of all types.</i>	Moderate	5,250
Eidetic Implant	<i>This implant goes in the head, with small parts mounted behind the ear and along the skull. It is able to record what is seen by the eyes, giving all the benefits of a hand-held video recorder, powered by the body's own bio-electric field.</i>	Moderate	525
Flamefinger	<i>This is a classic fire starting implant, spewing a flame from the pointer finger. The chemical fuel for the flamefinger fits into an internal synthgland in the inner forearm and lasts for 20 or more years. Works identically to the everflame.</i>	Moderate	750
Foot Anchors	<i>A long spike drives down from the heel into the ground and anchors the character in place. He cannot easily be knocked down or back, regardless of any combat results.</i>	Complex	800
Gill Implants	<i>This gives the character gills, either on his neck or along his torso. They allow the character to breathe underwater, drawing oxygen from the water molecules.</i>	Moderate	10,000
Harmonic Subdermal Gel Implants*	<i>Layers of harmonic gel rows are added just under the skin. From the surface, it appears that the character has cords of fatty deposits all over his body. The character will only take half damage from sonic weapons, and receives a bonus of +20 to any STA check to resist sonic stun effects.</i>	Complex	10,000
Identity Card Implant	<i>It is a simple RFID identity device on a microcircuit, implanted under the skin. It serves as a passport, driver's license, and general frontier identification credential.</i>	Simple	2
Infrared Ocular Implant	<i>Allows the character to see into the infrared spectrum. He can see things by the heat they give off, and can make out structures and objects by the way they absorb or dissipate heat.</i>	Complex	12,000
Knuckleplating	<i>Simply adds +4 to punching damage. Popular with pugilists and martial artists. Barely noticeable with casual searching.</i>	Simple	100
Liquifilter Implant	<i>This is a specialized filtration system that goes into the body after the esophagus but before the stomach. It filters toxins out of liquids and allows the character to live off tainted water.</i>	Simple	330
Low-light Ocular Implant	<i>Allows the character to see effectively in any level of light, from near pitch black to bright and sunny. His ocular implants adapt to a wide array of ambient lighting conditions.</i>	Complex	12,000
Lungfilter Implant	<i>Acts as a combination gas filtration mask and rebreather. Powered from the body's own bioelectric field. No replaceable filters necessary, as all toxins are filtered through synthglands and released as liquid waste through urine stream.</i>	Simple	6,800
Magnasole Implants	<i>This is a magnetic material that implants into the soles of the feet, just under the skin. It allows the character to walk freely on metallic hulls while in zero gravity.</i>	Simple	1,000
Magnification Ocular Implant	<i>Allows the character to focus on objects farther away than normal. Zooming and focus can be controlled mentally, and allows the character to see up to 5x normal distance.</i>	Complex	8,000
Med-Trace Tag	<i>As Trace-Tag, may be implanted. Refer to Starfrontiersman#3 for more information.</i>	Simple	100
NeuralComp	<i>This is an implanted computer system. It is miniaturized and powerful. It is a level 4 computer with up to 100 function points worth of programs (selected by player at the time of implant).</i>	Complex	1,700,000
Northpoint Implant	<i>A digital compass implant, giving flawless awareness of magnetic north. Can be fooled by strong magnetic fields, allowing the character the ability to detect magnetic sources nearby.</i>	Moderate	225
Plasteel Cutter Implant	<i>The index finger has a retractable carbon-enhanced steel cutter, the palm has a simple suction mechanism. Allows quick removal of unarmored glass, allowing quick building/vehicle entry.</i>	Complex	1,200
Reflex Implant, Basic	<i>This wires the character's body for faster response times, replacing key nerves and upgrading the characters electrical network in his own body. This improves his RS score by +20 for the basic model. This also adds +2 to Initiative rolls. Requires no energy source.</i>	Moderate	500,000

* As each of these implants change the nature of the character's skin, they cannot be applied to the same character at one time.

BIONIC IMPLANTS (Continued)

Implant	Description	Type	Cost
Retractable Finger Blades	<i>Tiny razor-sharp blades that can be mentally commanded to extract from the fingertips. Made of a duraplasic alloy, they do not set off metal detectors. Used to pick pockets (+10% to any such roll) or cut foes (adds +2 to punching damage when striking unarmed, though this damage is not cumulative with knuckleplating since it strikes with a different part of the hand).</i>	Complex	600
Self-Repair Implant	<i>This is a powerful and highly-functional diagnostic and repair system implanted into the torso. It is wired into nearly every organ and into the central nervous system. It can monitor functions, administer drugs, even resuscitate if necessary. It allows the character to regenerate at a rate of 1 STA per hour until healed fully. The healing is fast and harsh, and scarring is common even for injuries that wouldn't have scarred had they healed unaided. The self-repair unit must be exchanged every four years as it runs out of drugs and fills with waste product.</i>	Complex	250,000
Skeletal Augmentation	<i>This implant is highly invasive. It reinforces (or in some locations completely replaces) a character's natural skeletal system. A character with a skeletal augmentation is highly durable. They add +2 to their punching damage when attacking unarmed (cumulative with knuckleplating). A character with skeletal augmentation also takes only half damage from inertia-based bludgeon attacks.</i>	Complex	1,250,000
Smuggling Compartment Implant	<i>This is a compartment with concealed artificial skin covering it, allowing a character to conceal a small item (no larger than a knife or rolled up piece of paper). It is doubtful the smuggling implant will be found during a search – an Intuition check is required with a penalty of -10 to the roll.</i>	Simple	600
Synth-eyes	<i>Replaces eye lenses with synthetic ones, wired to an implant in the head. Eyes can be mentally commanded to change color. Can be worn over other ocular implants.</i>	Complex	1,000
Synth-flesh	<i>Replaces skin follicles with synthetic ones which secret pigment into skin at will, mentally commanding color changes and patterns to appear as desired.</i>	Complex	5,500
Synth-hair	<i>Hair follicles replaced. Hair is synthetic and wired to an implant in the head, which connects to the brain. Hair can be mentally commanded to change color, style, length.</i>	Complex	1,200
Timepiece Implant	<i>An implant that transfers timing information to the recipient's brain. Allows the character to automatically know the time and date at all times. Also provides with perfect timing through a stopwatch interface, and can awaken the character at specified times. Mental interface only.</i>	Moderate	300
Toxi-rad Gauge Implant	<i>This is a device used to test toxicity of the atmosphere, as well as radiation levels. It is an implanted version of the Toxi-rad gauge found in the conventional equipment lists.</i>	Moderate	375
Trace-Tag	<i>This is described in Starfrontiersman#3, but is listed here because it can be, in fact, an implant. If using these rules, consider using the Tag Tracker in your games as well.</i>	Simple	25
UniSolve Spray Implant	<i>The body is covered with micro emitters, able to release stored solvaway spray to dissolve tangler grenade strands. Left thigh includes slot for five solvaway spray canisters, which all release one turn after being entangled. The implant has a 75% chance of freeing the character from the entanglement.</i>	Moderate	7,500
Universal Translation Implant	<i>Bionic version of the polyvox described in the Star Frontiers book, but powered by the body's own bio-electric field.</i>	Moderate	22,500

CYBERNETIC ENERGY SOURCE IMPLANTS

Implant	Description	Type	Cost
Biobattery, Large*	<i>This is a very large implant that covers all of a user's back with ridges of biological powercells. It is treated as a 100 EU internal biological energy source. It recharges at a rate of 5 EU per hour by drawing on a combination of chemical reaction (due to bodily movement) and the body's own bioelectric field. It also includes four connections from which zipcords extract to connect to other devices to power them.</i>	Complex	250,000
Biobattery, Moderate*	<i>This is a 50 EU internal biological energy source. It recharges at a rate of 2 EU per hour. It includes two jacks on the waistline where zipcords can be attached to connect to other devices to power them. Other than the lower statistical complexity, it is similar to the large biobattery.</i>	Complex	125,000
Biobattery, Small*	<i>This is a 20 EU internal biological energy source that can power any implant that needs an EU source. Biobatteries can recharge themselves at a rate of 1 EU per hour. Unlike the moderate and large biobatteries, the small one comes with no zipcord to power other devices.</i>	Moderate	18,750
Emergency Source Jack	<i>This is a backup jack. A character whose biobattery fails can don a power beltpack, or backpack and connect their internal implant power network to the power source via a standard power zipline.</i>	Simple	200
Emergency Source Slot	<i>This is a backup slot. Players can slam a standard 20 EU power battery into the slot and operate off this reserve power. The slot can be located anywhere, but is often in the thigh.</i>	Simple	100

* Although the character who uses it can easily get used to it, there is some small amount of pain when the EU discharges for use by implanted equipment.

CYBERNETIC IMPLANTS

Implant	Description	Type	Cost
Active Sonar Implant	Actively pings in ultrasonic frequencies. Receives/translates responses. Works in all environments except a vacuum. Emitter and detectors located in head and ear.	Moderate	18,750
Autofire Arm Implant	The forearm has a section that slides aside, and a special automatic projectile weapon snaps up into place. It can be operated as if it were an autopistol in all respects. The weapon must be fed by a 20-bullet magazine. The weapon snaps back into the forearm and is concealed by a closing flap of artificial skin.	Complex	20,000
Blasthand Implant	This is an implanted BlastPistol and works like a BlastPistol from Starfrontiersman#1 in every effective way. Beam emits from the open palm. Relies on an EU energy source.	Moderate	6,500
Electrohand Implant	This is an implanted Electrostunner which can mentally be set to STUN or HARM mode. Relies on an EU energy source. Normally placed in the chest, but can be in hand.	Complex	50,000
Environmental Implant	This gives the character an enclosed environmental system, meaning the character can be exposed to trace toxins, heat and cold extremes, and more. It covers the skin in a gray shiny plastic-like substance, and the mouth gains a tight enclosed seal. Protective lenses cover the eyes, and much more. Requires power source.	Complex	50,000
Holo-field Implant	Concealed but plentiful microprojectors, able to project a holographic image of any one of several programmed appearances. Small microdisk slot in the character's wrist allows loading of a new identity. Requires EU power source, drains 1 EU per minute it is in use.	Complex	100,000
Holo-field Scrambler Implant	The character's thumb and small finger of one hand broadcast a holographic white noise that causes any holographic field within 10 meters to flicker and fail intermittently, revealing its nature. Identical to the holo-field scrambler from Starfrontiersman#5. Requires EU power source. Each activation drains 2 EU.	Complex	150,000
Laserhand Implant	This is an implanted Laser Pistol and works like one in all ways. Mentally set power consumption rate (from 1 to 10 EU per shot). Damage is 1d10 per EU, just like a normal Laser Pistol. Relies on an EU energy source.	Complex	60,000
Reflex Implant, Cutting-edge*	As per the basic bionic model above, but the increase to the character's RS score is +40 instead of +20. This adds +4 to initiative rolls. Drains 2 EU per hour.	Complex	2,000,000
Reflex Implant, Improved*	As per the basic bionic model above, but the increase to the character's RS score is +30 instead of +20. This adds +3 to initiative rolls. Drains 1 EU per hour.	Moderate	1,000,000
Robotic Arm	This replaces the character's arm and hand with an improved version. Having this device allows the character to boost his STR score by spending EU. STR cannot exceed 100 without also gaining a robotic torso. Requires power source. Drain varies.	Complex	100,000
Robotic Leg	This replaces a character's leg. One robotic leg adds 50% to a character's base movement rate and leaping distance. Two robotic legs doubles a character's base movement rate and leaping distance. Requires Biobattery source. Drains 1 EU per hour per limb.	Complex	100,000
Robotic Torso	This replaces the character's torso with a total robotic one. It requires the character's two arms and two legs be also replaced by robotic components, leaving only the head remaining. Although such a robotic conversion has benefits, it is also de-humanizing. Damage threshold will now equal twice STA score (no longer equal to STA like a flesh & blood human). STR and DEX will now be determined by robotic limb selection, and movement rates will be based on the robotic legs. The character no longer heals on his own – he requires repaired like a robot. He can also have a robotics expert install up to 10kg of gear by paying an extra 10% integration fee. This implant requires an EU energy source. Drains 1 EU per hour to sustain the character's biological head and protected spine.	Complex	1,500,000
Rockethand Implant	This is an implanted gyrojet pistol and works like one in all respects. The gyrojet rockets are not fed in by a magazine, however. They are inserted one-at-a-time into the elbow in the direction of the hand. Once all ten are fed into the elbow loader, the weapon is fully loaded and ready. The rockets emit from a small hole just under the wrist.	Complex	20,000
Sonic Claw	This is an implanted technology similar in all respects to a sonic sword. It emits from the hand/wrist or some other obvious focal point. It is powered by an EU energy source.	Complex	30,000
Sonic Talon	This is an implanted technology similar in all respects to a sonic knife. It emits from the hand/wrist or from some other obvious focal point. It is powered by an EU energy source.	Complex	5,000
Sonichand Implant	This is an implanted Sonic Stunner and works like a Sonic Stunner in every way. Beam emits from the fingertips of one hand. Relies on an EU energy source.	Complex	50,000
Subdermal Plating, Military-grade	This provides 20 points of damage reduction against all damage types, but unless STR is at least 70, the character is penalized by -10 on all DEX/RS checks and related rolls. Cannot be used with other dermal/subdermal implants.	Complex	400,000
Subdermal Plating, Security-grade	Provides 10 points of damage reduction against all damage types, but unless STR is at least 70, the character is penalized by -10 on all DEX/RS checks and related rolls. Cannot be used with other dermal/subdermal implants.	Complex	150,000

* When a character has this implant and no power source, his RS score is penalized by -10.

CYBER-TALON

Type: bionic, complex cost: 2,000 CR

A single large bladed hook-like weapon retracts in and out of a hardened skin slot in the back of the hand. The implant has connections into the character's brain, allowing a mental command to extract or retract the talon. This takes some practice, but after a short while the talon can be extracted as easily as moving a finger.

Use of the cyber-claw is governed by use of the melee weapons military skill. If the character possesses no skill in melee weapons, he uses half his STR or DEX score with no level adjustments.

Statistics for the cyber-claw are identical to those of a monosword.

The blades are mono-filament. If a 10 is rolled on any of the damage dice during any attack, the damage the weapon causes thereafter is reduced by one. These penalties accumulate. So if a 10 is rolled five times, the damage will be 4d10-5 until the blades are replaced. The blades can be replaced with fresh blades for 800 CR. The implanted character can replace the blades himself.

CYBER-TALON

Type: bionic, complex cost: 2,000 CR

A single large bladed hook-like weapon retracts in and out of a hardened skin slot in the back of the hand. The implant has connections into the character's brain, allowing a mental command to extract or retract the talon. This takes some practice, but after a short while the talon can be extracted as easily as moving a finger.

The talon is made from a very durable substance. It can cut through many materials, including body armor. Use of the cyber-talon is governed by the melee weapons military skill. If the character has no levels in that skill, he uses the weapon unskilled.

Statistics for the cyber-talon:
skill: melee +5, damage: 2d10 (inertia).

The talon is mono-filament. If a 10 is rolled on either of the damage dice during any attack, the damage the weapon causes thereafter is reduced by one. These penalties accumulate. So if a 10 is rolled five times, the damage will be 2d10-5 until the talon is replaced. The talon can be replaced with a fresh one for 200 CR. The implanted character can replace the blades himself.

DERMAL CHROME

Type: bionic, complex cost: 12,000 CR

The character's skin is implanted with hundreds of synthglands which emit a chemical. This chemical solidifies into a shiny flexible substance on contact with oxygen. The result is a completely reflective body. Although oxygen is required to cause the chemical hardening reaction, it is not necessary to maintain the hardened state of the chemical.



Augmentation can lead a species down a path of enlightenment... or can make a race into an abomination of what it once was. Image by Levi Dansam (see her other works at deviantart.net).

The character receives a -10 penalty to all stealth checks, but takes only half damage from energy attacks like those from a laser pistol or rifle. Activating the dermal chrome takes one turn and is done via a mental command. Removing the dermal plating is done with a second command, and takes another full turn.

This is a full-body implant, including the face. It changes the nature of the character's skin and therefore cannot be given to a character that already has harmonic subdermal gel implants or dermal infrared treatment.

The character can use these glands once per 24 hour period and the chrome effect will last all day. However, as the chrome absorbs damage you must keep track of it. When it has absorbed 25 points of damage, it is no longer able to protect the wearer and he must wait until the next day to re-manifest his chroming.

This is a defensive implant. Characters with dermal chrome receive no additional protection by wearing an albedo suit. If the character wears another type of protection over his dermal chrome, the topmost layer is the only layer which provides protection. For instance, if a character with dermal chrome wears a skeinsuit, he will receive the benefit of the skeinsuit and not his dermal chrome until the suit is depleted. Then his

dermal chrome will protect him through the shredded skeinsuit.

DERMAL CLIMBING PADS

Type: bionic, moderate cost: 3,000 CR

This implant is specialized padding on hands, elbows, knees, and feet. The padding is in the form of synthetic follicles of special hairs which hook into surfaces. The hairs are very strong and short, and split (and re-split) giving an almost velcro-like effect. This implant allows a character (as long as he has enough STR to lift himself) to climb vertical or inverted surfaces without risk of falling. Nearly any surface can be climbed, with the exception of glass or chromed surfaces.

Dermal climbing pads cannot be removed by any conventional means. The stiff padding grows through burn or scar tissue, and re-grows itself quickly if somehow cut. The pads are not visible to the naked eye, but can be felt if touched. Use of the dermal climbing pads requires any three of the following body parts to have contact with the surface being climbed: hands, elbows, knees, or feet. If fewer than three of those are body parts are making contact with the surface, a STR check is required to remain clinging.

Despite the fact these implants are on the skin's surface, they do not interfere with the ability to implant other dermal (or subdermal) implants.

DERMAL INFRARED TREATMENT

Type: bionic, moderate cost: 5,250 CR

The character's skin is infused with a special coating that masks his heat signature. This makes him invisible to infrared detection devices of all types.

The more wounded the character, those wounds will show up on infrared detection systems. Therefore, the character must constantly be covering up his injuries if he wishes to maintain his invisibility to such technology.

If a character is reduced to half his body point maximum, he only has a 50% chance to avoid detection from IR sensors (from robots, computers, vehicle or building security sensors, or characters with infrared goggles). If reduced to 10 current STA or less, he only has a 25% chance to avoid such detection.

When the skin regenerates itself, the infrared treatment regrows. The dermal infrared treatment is so infused with the character's skin that no other implant which covers the skin can be given to a character with this implant. This means no character with a dermal infrared treatment can also have dermal chrome or harmonic subdermal gel implants.

EIDETIC IMPLANT

Type: bionic, moderate cost: 575 CR

This implant goes in the head, with small parts mounted behind the ear and along the skull. It is able to record what is seen by the eyes, giving all the

benefits of a typical hand-held 2d video recorder, powered by the body's own bio-electric field. It is an inexpensive implant but one favored by spies and journalists.

The imagery recorded is not holographic. It is simple imaging, from one eye. The eye that does the recording is somewhat obvious because of the coloration (the iris is replaced by a light gray disk with automated aperture). The character is able to see through the eye as if it were his own.

Basic audio is also recorded, drawn from the vibrations picked up from the character's ear drums. The camera can take stills or motion video, and records it onto a limited but spacious memory disk loaded into a small slot behind the character's ear. The disk can be removed and placed in nearly all standard computers in the frontier and the images and videos transferred.

FLAMEFINGER

Type: bionic, moderate cost: 750 CR

This is a classic fire starting implant, spewing a flame from the pointer finger of one hand. The chemical fuel for the flamefinger fits into an internal synthetic glandsack reservoir in the inner forearm and lasts for 20 or more years. This implant works identically to the everflame found in the Alpha Dawn game book.

The flamefinger can be activated by a mental command, but also requires a flicking motion from the finger. This helps ensure the character doesn't accidentally start fires during dreams or similar. The finger can be used to burn through ropes or zipties used to bind his hand – and few sensors can detect the presence of the implant. Although not designed to use as a weapon, creative characters will find a way to make this implant dangerous.

The reservoir is located deeply in the forearm and will not rupture from most normal injuries.

FOOT ANCHORS

Type: bionic, complex cost: 800 CR

The character's shins have retracted spikes. Upon mental command, the spikes shoot downward, digging into most surfaces (for instance, solid earth, concrete, stone), anchoring the character in place.

Regardless of combat results, the character is anchored in place and cannot be knocked down or backwards. The foot anchors can be retracted or extended at will and do not count as an action.

GILL IMPLANTS

Type: bionic, moderate cost: 10,000 CR

Characters with gill implants can breathe underwater. The location of the gills varies. Some characters implant them on the sides of their torsos, while others prefer them on their necks or cheeks. Regardless of the location, characters will be able to breathe under

water or while submersed in some other liquid as long as the liquid has oxygen in it.

Gill implants interface with the character's lungs. Characters cannot breathe from their mouths while breathing through their gills. Therefore the character is unable to speak underwater, though they may move their mouths freely. Their gills can emit no noise – they are passive devices which take over when the character is submersed.

HARMONIC SUBDERMAL GEL IMPLANTS

Type: bionic, complex cost: 10,000 CR

This implant places rows upon rows of harmonic gel just under the top layer of skin. The character's flesh will regenerate the harmonic gel when the character receives damage, just like it will rebuild flesh.

The character will take only half damage from sonic attacks, and the character receives a bonus of +20 to any STA check when trying to avoid sonic-based stun effects.

This implant is quite obvious. The rows of gel are easy to spot, and when wounded the bluish gel bleeds along with the red blood of the character, leaving purple stains where the character is shot or cut.

Like other full-body skin implants, characters with harmonic subdermal gel implants cannot be also implanted with dermal infrared treatment or dermal chrome. As the gels absorb half the damage from sonic attacks, players must keep track of these points absorbed. When 25 points of sonic damage have been absorbed, the gels are too damaged to be effective protection. As the character heals damage, he also heals damage to his harmonic subdermal gel implants.

For instance, a character with this implant sustains 32 points of sonic damage – 16 of which was absorbed by the suit. Later he is healed by a medic for 12 points. His harmonic subdermal gel implant is now considered to have only 4 points of damage.

This is a defensive implant. If the character wears another type of protection over his harmonic subdermal gel implant, the topmost layer is the only layer which provides protection. For instance, if a character with this implant wears a skeinsuit, he will receive the benefit of the suit and not this implant until the skeinsuit is depleted. Then his harmonic gel implant will protect him through the shredded suit.

IDENTITY CARD IMPLANT

Type: bionic, simple cost: 2 CR

It is very common in the frontier to have your identity card implanted. This creates a radio-frequency identification tag just under the character's skin. Many detectors and scanners can read these implants – it is common in the frontier.

This is described in the normal equipment section, page 82 and is only included in these lists because the item

is, in fact, an implant. In settings where no cybernetics are used, this piece of equipment still exists. In settings where cybernetic implants are permitted, an identity card implant counts as a bionic implant.

INFRARED OCULAR IMPLANT

Type: bionic, complex cost: 12,000 CR

The character replaces one of his eyes with a one that is able to see in the infrared spectrum. He can see things by the heat they give off, including seeing the footsteps of a character, or the places where his hand touched a door knob or wall. He can even see walls, floors, etc. By the way in which their materials absorb, keep, or release heat.

Characters with infrared ocular implants are unhindered by smoke grenades or complete darkness. The resolution of the infrared ocular implant is quite good. The character can even read printed text by being able to see the difference between the black and white areas of the page... although it does take some amount of effort to focus on the words.

The eye replaced by the infrared ocular implant is obvious. There is no white to the eye, and the iris is red. The pupil mechanically moves with a small mechanical noise. It is normally fully closed to a tiny dot when the character is in light. When he needs to see in the infrared spectrum, however, he mentally commands his implant's pupil to open. It translates what is "seen" by the implant into visual imagery projected into the character's retina, allowing him to "see" what there is to see.

Characters can normally have only one ocular implant, unless they wish to replace both of their eyes of course.

KNUCKLEPLATING

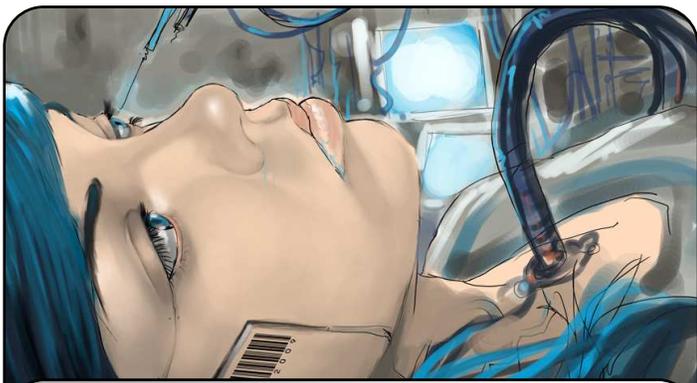
Type: bionic, simple cost: 100 CR

The character's knuckles receive weighted reinforced plates which run through the hand and clamp to the top of the forearm. Receiving such reinforcement, the character can punch with tremendous force without risking hurting his hand. The plating adds +4 to punching damage. Using brass knuckles will not add to the damage caused, since the knuckles themselves are just as strong as the brass. Knuckleplating is more common than many of the other implants and Referees may wish to allow them even when other implants are not permitted in his game.

LIQUIFILTER IMPLANT

Type: bionic, simple cost: 330 CR

The character receives an implanted specialized filter. It goes in directly following his esophagus but before the stomach. This implant allows a character to drink water tainted with toxins. This implant is sometimes used to immunize entire colonies against toxins located in planetary water supplies.



Some implants require maintenance. This is a "quick sketch" by Manda (screenname *SeriousBreakfastTime) over at deviantart.net.

The filters are organic in nature and regenerate themselves over time by drawing nutrients out of foods the character eats. Eating vitasalt pills will help regenerate the filters quicker, and on worlds where this implant is used to for entire colonies, food supplies already include these pills crushed into the supplies.

One side effect is that a character's skin takes on coloration specific to the type of chemicals being filtered. Colonies where characters have bluish, reddish, or other skin colors is quite possible. After a year or so of being away from such a tainted water source, the skin will gradually return to normal.

LOW-LIGHT OCULAR IMPLANT

Type: bionic, complex cost: 12,000 CR

The character replaces one of his eyes with this implant. It is able to adapt to a very wide variety of light conditions, allowing the character to see normally if there is even a single star shining in the sky. Of course, it cannot allow the character to see in pitch black.

The character's vision is able to be "flashed" by sudden bright lights when it has been adjusted to a very low-light condition. This makes the eye unusable for a turn.

This implant is popular among scouts and hunters, allowing the character to hunt at night without penalty. Unlike other ocular implants, this implant can be made to appear quite similar to the character's other (real) eye. Because of this, it can often go undetected.

LUNGFILTER IMPLANT

Type: bionic, simple cost: 6,800 CR

The character's lungs are replaced by a set of very efficient cyber lungs. They do the same job a normal organic lung does, but are better in that they can filter out a large array of toxins. They cannot create oxygen where none exists of course, but if oxygen exists in the atmosphere they breathe, the character will be able to exist just fine.

Characters with a lungfilter implant can ignore inhalants suddenly placed in their path such as poison

grenades and various types of biological gas-based warfare. He is simply immune.

The character can hold his breath for a very long amount of time, since the implant buffers oxygen for such needs. Double the amount of time a character can hold his breath.

The lungfilter implant can also manage in more or less dense air pressure than a normal lung. This allows the character to reach higher altitudes safely while mountain climbing or exist on worlds that have a more dense atmosphere.

MAGNASOLE IMPLANTS

Type: bionic, simple cost: 1,000 CR

The bottom of the character's feet are made into electromagnetic material. The character can turn on the electromagnetic feet through a mental command, and can turn it off similarly. Once enabled, the character can walk on any metallic surface designed for use with magnetic shoes.

Many space stations and spaceships include support for such magnetic shoes so characters can get around in zero gravity. Although awkward, they allow nearly normal movement rates across specially prepared surfaces.

With this implant, the character need not use magnetic boots as mentioned in the Alpha Dawn book. He is considered to have them already, even if wearing other shoes or boots. Additionally, he can cling to any surface that can hold his weight as long as that surface is ferrous.

For instance, a character might "stand" on a pipe on the ceiling and walk along it, even though he is upside-down.

MAGNIFICATION OCULAR IMPLANT

Type: bionic, complex cost: 8,000 CR

Popular with scouts and hunters, these implants replace an eye of the character. They include a tiny microcamera and have an image processing system implanted behind the eye, replacing the character's normal retina and interfacing to the optic nerve directly.

Magnification ocular implants allow the character to zoom his vision up to five times the normal distance, allowing him to focus on things very far away. Additionally, he sees a small crosshair superimposed in the center of his vision. He can move the crosshair over various objects in view and if kept there for 1 turn he will be made aware through a mental interface exactly how far away the item is. If it is in motion, he will also be made aware of the speed it is moving and also how long it will take that item to reach him.

The magnification ocular implant is obvious. As the character uses it to look through, it makes mechanical noises as it moves and focuses. The entire eye is

replaced with one dark black or blue eye with a single mobile pupil in the center. Some painted varieties exist, containing a glossy pretend eye that fools no one but is a bit less strange to look at.

Characters can normally have only one ocular implant, unless they wish to replace both of their eyes of course.

MED-TRACE TAG

Type: bionic, simple cost: 100 CR

See this in the Starfrontiersman#3. In settings where the Referee doesn't allow cybernetic implants, this implant may still exist. It is included in this list because it is, in fact, a bionic implant. In settings where cybernetics are allowed, this implant counts towards the character's Bionic threshold limits described above (see Dangers of Implants).

NEURALCOMP

Type: bionic, complex cost: 1,700,000 CR

This is a highly sophisticated implant. This implant is for a player who wishes to have his character implanted with an internal powerful computer.

The neuralcomp is a level 4 computer that is roughly palm-sized (fitting in the head alongside the character's own gray matter). It can store up to 100 function points worth of programs (selected by the player at the time of implant). It is equipped with an RF interface and a fiber-optic jack located in the back of the character's head under a removable patch of hair, allowing the character to interface with other computers.

The computer has no keypad and no display – the character “sees” the display in his mind. Normally, while using the computer, he closes his eyes because seeing the computer screen superimposed over what he sees with his normal eyes is disorienting. Rather than type, he mentally sends the typed characters to the computer. It's all very fast and efficient.

Lesser neuralcomps may exist but few people would bother with implanting a computer that is less than maximally powerful.

NORTHPOINT IMPLANT

Type: bionic, moderate cost: 225 CR

This is a simple implanted digital compass, giving the character an automatic ability to detect which direction is north. Like any other compass, it can be affected by strong magnetic fields. On some worlds, magnetic north may not always be in the direction the character expects. Any limitation which exists for a traditional compass also exists for the northpoint implant.

PLASTEEL CUTTER IMPLANT

Type: bionic, complex cost: 1,200 CR

This is a hand implant. The index finger has a retractable carbon-enhanced steel cutter, and the palm

of the same hand has a simple suction mechanism implanted in it. The palm is placed against a piece of glass, and the hand is moved in a circular motion. After a few moments, a standard piece of glass can be cut away, allowing quick (if illicit) entry into a building or vehicle. This doesn't work with armored glass, but works with traditional civilian-grade glass.

The cutter tip is not designed for cutting flesh and cannot be used as a weapon. Since ownership of the plasteel cutter implant can only be intended for illegal activities, it is considered illegal by some governments.

REFLEX IMPLANT, BASIC

Type: bionic, moderate cost: 500,000 CR

This implant is very invasive. The character's own central nervous system gets replaced/upgraded with parallel lines, and certain key nerves are completely replaced. This upgrade to the character's natural electrical network improves the character's RS score by +20. It therefore adds +2 to initiative rolls. This is the basic model – and requires no additional energy source to power/use.

As the character spends development points to improve his own RS score, his implant is automatically better since the implant is an improvement over the character's own reflexes.

Characters with a basic reflex implant tend to be jumpy, jittery. They are sometimes accused of having too much caffeine – though they can control this when they apply conscious effort.

RETRACTABLE FINGER BLADES

Type: bionic, complex cost: 600 CR

Each of the character's fingertips of one hand have a tiny but effective razor that can extend from under the fingernail. The blade is mentally extracted/retracted nearly instantaneously. The blades themselves stick on only slightly, being almost unnoticeable.

The blades are fairly durable. They're made of a strong duraplastic alloy and do not set off metal detectors. They can be used to scratch someone but are designed for use in thievery (they give a bonus of +10 to all rolls where they can come in handy, such as picking pockets). Used in combat, this implant adds +2 to the normal unarmed damage the character causes in combat – not compatible with the bonuses provided by knuckleplating or skeletal augmentation (because it uses the fingertips rather than fist).

The blades will not cut material stronger than thick leather or skinksuit cloth. If broken, the blades can be replaced for 100 credits.

SELF-REPAIR IMPLANT

Type: bionic, complex cost: 250,000 CR

This is a very powerful implant. It includes powerful diagnostic systems, able to detect problems with the character's body representing damage and toxins. It

also includes various holding reservoirs containing necessary drugs to help manage the character's medical condition and is even able to defibrillate the character if his heart stops. It is a very effective auto doctor system.

In game terms, it allows the character to regenerate 1 current STA per hour until he is healed fully. The healing is very fast but imperfect in many ways, causing nasty scarring.

The character's implant will give him a +20 to any STA check when knocked unconscious in battle to help ensure he is revivable. Additionally, the character receives a +20 bonus to any STA check to remain conscious when hit with a stun attack.

There exist many organic glands able to replenish the various chemicals needed by the self-repair implant connected to it within the character's torso. But as the self-repair implant works, it generates waste. Some of that waste it passes through the character's waste system, but some it stores. Every four years, the character must replace the self-repair implant. Replacing the implant is not as expensive as the initial installation – it only costs 50,000 credits and a few hours.

SKELTAL AUGMENTATION

Type: bionic, complex cost: 1,250,00 CR

This implant takes a great deal of time to install. It is a gradual replacement or reinforcement of a character's entire skeletal system. When the procedure is complete, the character's skeleton is laced or replaced with a highly durable duraplasic material. It doesn't set off metal detectors, but is much stronger than bone itself and therefore gives the character some advantage.

Characters with skeletal augmentation can add +2 to the damage caused by any unarmed attack (this adds to knuckleplating not to retractable fingerblade implants). Additionally, the character takes only half damage from any inertia bludgeon attack (such as unarmed fists, clubs, nightsticks, or falls).

SMUGGLING COMPARTMENT IMPLANT

Type: bionic, simple cost: 600 CR

This implant isn't so much of an implant as it is a carved-out space in the character's body. Often replacing a large area of meat and muscle (such as a thigh, calf, or other muscular region), this is a small area carved away and lined with durable lining. A closeable door exists, which is covered with skin tone matched plastiflesh so as to appear identical to the character's own flesh. It is the ideal smuggling compartment.

A character can conceal a small item (no larger than a knife or unextended sonic sword – perhaps a rolled up piece of paper, etc.) Within the smuggling compartment implant and it will be hidden from view. The lining that surrounds the item is made of materials

which help mask the hidden item from various forms of view (such as x-ray machines, etc.)

Smuggling compartments cannot be opened automatically by mental command. They simply have a small catch/button that resembles a mole or freckle. When pushed, the compartment door slides back to allow access to the compartment. Pressing the mole/freckle a second time forces the compartment door to slide closed.

SYNTH-EYES

Type: bionic, complex cost: 1,000 CR

The character has lenses implanted in place of the lenses which normally protect his eyes. This implant can be added over other ocular implants such as low-light ocular implants or infrared ocular implants.

The lenses are made of special transparent electrical components wired to a small implant nestled between the halves of the brain, wired into both. Upon command, the character can cause his implant to tint his lenses to act like a pair of implanted sunglasses. Additionally, the lenses can be commanded to cause creative effects on the appearance of the eyes. For instance, the character might change his eye color or cause his eyes to appear completely white, devoid of iris or pupil. Some people like to make their eyes glow slightly. Although none of this affects the vision capabilities of the character, they are all fun to roleplay.

The Referee permits, creative use of synth-eyes during intimidation, seduction, or other social interaction rolls will allow a +10 to any relevant roll.

SYNTH-FLESH

Type: bionic, complex cost: 5,500 CR

The character receives networks of synthetic gland implants all over the body. These microglands are wired back to a central implant in the torso which is then wired into the brain via the central nervous system.

Upon command, the character can modify his skin pigmentation to match that of any possible skin color the character's species (presumably human unless playing in a setting which includes other races) is capable of. The color change takes about one minute and causes the character's top layer of skin to flake off, revealing the new colored skin and a pile of dead flesh on the ground.

Creative characters have more options than simply changing their skin color. A character who has an Intuition score of 50 or more is able to cause artistic shapes to appear on their newly grown skin. This is normally in the form of tattoo-like art or similar, but can also appear like leopard spots, tiger stripes, etc.

A character who changes his skin to pitch black can, if also clad in stealth-permissive clothing (or none at all!) receive a +10 bonus to any checks to hide in shadows.

A little cyber gear can turn the tiniest slip of a character into a killing machine, but at what cost? How much of your humanity are YOU willing to give up? Artwork by Mikajima at deviantart.net.



SYNTH-HAIR

Type: bionic, complex cost: 1,200 CR

The character's head of hair is made bald by surgical removal of all follicles. New follicles are implanted which generate synthetic hair made of special fibrous circuitry. The follicle implants are networked together and wired to an implant that is placed in the head and wired to the brain.

Upon mental command, the character with this implant can command it to cause his/her hair to straighten, wave, curl up, or take on an appearance similar to being dirty or frizzy. The implanted synth-hair can be commanded to be any length from appearing totally bald to having hair down to the character's tailbone. It can also be commanded to change color, taking on any color the character can imagine.

The hair change takes about a single turn. It is helpful for facilitating quick disguises or for getting ready quickly for a night on the town.

Synth-hair, if cut or burned or damaged, can grow back but it takes several weeks for the synthetic fibers to be regenerated naturally.

TIMEPIECE IMPLANT

Type: bionic, moderate cost: 300 CR

The character who receives this implant always knows what time it is (galactic standard time). The implant can be mentally set, reset, etc. and includes multiple alarms. The alarms are not audible of course, they simply stimulate the areas of the brain necessary to awaken/alert the character.

The character can also time things with an internal stopwatch. He can issue the commands to start the timer, to stop it, and is aware of the amount of elapsed time.

This implant can also be used as an event planning calendar system. It allows a character to file away dates that are important to him and eliminate the chance of failure.

TOXI-RAD GAUGE IMPLANT

Type: bionic, moderate cost: 375 CR

The toxi-rad gauge is a hand-held (or worn) piece of general gear found in the general equipment list in the Alpha Dawn game. This is an implanted version of the conventional survival gear. It connects to the character's brain directly – but the implant itself is located in the character's arm and shoulder. It senses the atmospheric toxicity and radiation levels and provides internal mental alerts when conditions exceed acceptable levels. Exact measurement values can be queried as well.

A complex version of this bionic implant also exists. It has a small mineral/liquid sample port allowing minerals to be analyzed (and liquids as well). This allows the character to know the toxicity and radiation

levels of anything he wishes to sample, provided he can get it to fit in the sampling port in his shoulder. The cost of this complex version is 1,875 credits and is considered an upgrade to the standard toxi-rad gauge implant (not a separate implant).

TRACE-TAG

Type: bionic, simple cost: 25 CR

See this in Starfrontiersman#3. In settings where the Referee doesn't allow cybernetic implants, this implant may still exist. It is included in this list because it is, in fact, a bionic implant. In settings where cybernetics are allowed, this implant counts towards the characters limits.

UNISOLVE SPRAY IMPLANT

Type: bionic, moderate cost: 7,500 CR

The character's body receives dozens of tiny spray nozzle emitters covering various locations on his body. A network of tubing connects those emitters to a spray system located in the character's left thigh. Into this thigh is placed five solvaway spray canisters.

One turn after a character with a unisolve spray implant is attacked with a tangler grenade, the canisters will be released through the emitters. This allows the character a 75% chance of being immediately freed from the entanglement strands.

The character cannot mentally control this implant. It simply has a series of emitters and detectors. It senses the entanglement strands in liquid form and waits one turn before releasing the spray (because solvaway spray only works on hardened strands). If it successfully frees the character he can act normally during the turn (freeing himself doesn't count as an action - it was an automated process).

Five canisters of solvaway spray costs only 50 credits.

UNIVERSAL TRANSLATION IMPLANT

Type: bionic, moderate cost: 22,500 CR

This implant goes in the throat and also in the ear canal. It is programmed with all the core languages spoken in the frontier (each race's native language). Any language the character hears is translated (as well as it can be) to the character's native language. Additionally, he is able to speak in his native language and the implant translates his spoken text so it comes from his mouth in any of the programmed languages desirable.

Additionally, the character can set his implant to a "learn" mode. In this mode, he is able to listen to some unknown race and it will slowly learn the language and begin translating for the character. The implanted universal translator can store up to 4 additional languages in this way.

In all practical ways, this is simply an implant version of the polyvox found in the Alpha Dawn game manual.

CYBERNETIC ENERGY SOURCE DESCRIPTIONS

The major difference between bionic and cybernetic equipment is that cybernetic equipment requires a power source. Each of the following energy sources counts as an implant, and is summarized on the tables on previous pages. More thorough descriptions are found below.

BIOBATTERY

Large	Type: cybernetic, complex	cost: 250,000 CR
Moderate	Type: cybernetic, complex	cost: 125,000 CR
Small	Type: cybernetic, moderate	cost: 18,750 CR

Biobatteries are organic energy sources. They generate energy based on the body's magnetic field and on motion, in addition to some other means. They are normally used to power cybernetic gear, but can also be used to power normal gear as well.

There are three different sizes for biobatteries. Other than the amount of energy they can generate and store, all biobatteries work more or less identically. When a biobattery releases energy, the character with the implant can feel it. It actually hurts. As the character grows accustomed to the use of it, he gradually builds up a tolerance to the sensation, but it is always there. There is not game-related effect for this but it should be role-played.

When a character uses these energy units to power his internal cybernetic implants, the connection is made during implantation. When the character wishes to power external devices (such as a laser pistol or defensive projection shield), he must do so with his bio zipcord. It looks like a mole or freckle, but can be pulled out and attached to the device up to 1.5 meters.

- » **Small biobatteries** can hold only 20 EU worth of energy. They recharge themselves at a rate of 1EU per hour. A character with this size implant has no bio zipcord for using his implanted biobattery to power external equipment.
- » **Moderate biobatteries** hold 50 EU worth of energy. They recharge at a rate of 2 EU per hour and include 2 bio zipcords for powering external equipment.
- » **Large biobatteries** hold 100 EU worth of energy. They recharge at a rate of 4 EU per hour and include 4 bio zipcords for powering external equipment.

Example of use: a character has two robotic legs (each drains 1 EU per hour) and a single robotic arm (which also drains 1 EU per hour). He therefore has a need for 3EU per hour of power.

If he wants to make sure his power source never runs out, he could implant a large biobattery. Since it generates 4EU per hour, he is covered. If, however, he wishes to operate on a budget, he could implant one small and one moderate biobattery since they combine to 3 EU per hour of regeneration.

Of course, if he is truly on a budget, he could simply implant an emergency source jack or slot (see below) and rely on standard EU power batteries, beltpack, or backpack.

EMERGENCY SOURCE

Jack	Type: cybernetic, simple	cost: 200 CR
Slot	Type: cybernetic, simple	cost: 100 CR

Some characters add emergency source jacks to serve as backups. If their implanted power source becomes defective or is depleted for one reason or another, he can jack in to another power source (a power backpack, for instance) and get some temporary power. There are two types of emergency sources: a jack and a slot.

For characters with robotic legs, having an emergency backup jack or slot is vital... because if such a character loses his biobattery he cannot walk or run.

» **Jack** - An emergency source jack is merely a zipcord connection. It allows a character to connect his power network to an external source such as a power backpack or power backpack.

» **Slot** - An emergency source slot is a slot for a 20 EU power batterypack. Typically located in the torso, the character simply takes a power batterypack (the same kind which is used for most energy weapons) and slams it into his torso slot. He then can operate off the batterypack until he regenerates his internal power source.

Optional rule: If the Referee permits, any player who purchases a biobattery (of any size) may be assumed to have an emergency source slot and jack for free. If he allows this, do not count the emergency sources against the number of implants the character is permitted to have based on his LOG score (see dangers of implants).

CYBERNETIC IMPLANT DESCRIPTIONS

Each of these cybernetic implants requires external (or internal in the case of biobatteries) power. If the power is not present, the implant cannot be used. The power requirements of each device is listed below. It is important for a cybernetically enhanced character to keep his power reserves in mind at all times.

Some implants bleed off power slowly at a rate of one or two energy units per hour, but some drain away EU in large amounts – especially weapons and defenses. For this reason it is highly recommended for any cybernetically-enhanced character to also possess emergency source jacks and slots.

ACTIVE SONAR IMPLANT

Type: cybernetic, moderate cost: 18,750 CR

Active sonar sends out an ultra high frequency ping of energy from an implant located on the forehead (its visible components appear like a birthmark or tattoo – but people know what it is). It bounces and reflects, and the character receives the waveforms in special receptors located in his inner ear canal. His brain translates what is received with the aid of an implanted image recognition system and feeds what it “sees” to

the character. The end result is a character who can “see” with sound.

The active sonar has an appreciable range, and the character is able to send out the ping a long distance and receive the results. While outdoors, he can “see” a topographical map of a region roughly 1 kilometer in all directions, making him seldom surprised by difficult terrain. The effect relies on sound waves and so cannot function in a vacuum. Underwater, the effectiveness may be greater.

The active sonar requires a power source such as a biobattery or external connection via emergency jack or slot. The implant drains nothing while unused, but while used it drains 1 EU per hour of operation.

AUTOFIRE ARM IMPLANT

Type: cybernetic, complex cost: 20,000 CR

The character’s forearm is implanted with an automatic projectile weapon. The weapon is concealed in the forearm normally. A mental command sends a plastiflesh-covered sliding panel aside, and sends a large automatic weapon up into place. It is a projectile weapon that requires the use of projectile weapons skill to fire. Of course, like all weapons, it can be used unskilled.

The autofire arm implant uses a standard 20-bullet magazine found in wide use in the frontier. The ammunition magazine is snapped into place and the weapon is fired by mental commands as the character aims his arm at his foes. The character can even send a mental command to eject an empty magazine, but must use his free hand to slam a fresh magazine into place.

Finally, when the gunplay is done, a final mental command sends the weapon down into its compartment and closes the plastiflesh-covered panel door. Most characters with this cybernetic implant keep the weapon loaded at all times in his over-sized forearm. The weapon uses no energy to fire, but it does drain 1 EU to extend or retract.

Statistics for the autofire arm implant are identical to that of an autopistol.

BLASTHAND IMPLANT

Type: cybernetic, moderate cost: 6,500 CR

This implant places the inner workings of a blastpistol (Starfrontiersman#1) in the character’s forearm, wired to emitters in the palm of that hand. The character can mentally send the command to fire the blasthand once per turn, as long as he has EU to power it. Unlike the autofire arm implant, there is no need for a retractable/concealed forearm slot.

To power the blasthand implant, the character needs some sort of energy source such as a biobattery or emergency slot/jack. It drains 2EU from the power source each time the weapon is fired. Using the weapon successfully requires levels in the beam

weapons skill, but of course it can be used unskilled if the character possesses no such levels.

ELECTROHAND IMPLANT

Type: cybernetic, complex cost: 50,000 CR

The character receives an implant in the arm or hand. The outside of the hand has coils of metal running through the skin, winding back to some visible electronics in the forearm.

The implant is a weapon. It is able to emit a powerful electric attack at range. The electrical attack is harmful to biological beings, but doesn't have to be lethal. Like the electrostunner, it can be mentally switched between stun and harm modes.

To power the electrohand implant, the character needs some sort of energy source such as a biobattery or emergency slot/jack. It drains 2EU from the power source each time the weapon is fired. Using the weapon successfully requires levels in the beam weapons skill, but of course it can be used unskilled if the character possesses no such levels.

Note that the character cannot emit this electrical discharge while in hand-to-hand combat, since it requires careful use and activation (you cannot punch someone and blast them at the same time).

Statistics for the electrohand implant are identical to those of an electrostunner.

ENVIRONMENTAL IMPLANT

Type: cybernetic, complex cost: 50,000 CR

The character undergoes a drastic series of complicated upgrades to his external skin layer, as well as receiving clear protective membranes over his eyes and inner ears. His sinuses and even his pores receive treatment. The character's lips receive special sealing rings and muscle pistons that cause it to come to a complete tight seal. It is a grueling process.

In the end, the character's skin looks shiny and gray – almost plastic. The character has a completely sealed environmental system. He can exist normally in hostile planetary environments. The implant includes the equivalent of a regenerative biological filtration mask. He can manage normally in nearly all environments except the harsh vacuum of space.

The implant includes heating and cooling internal circuits that helps the character exist easily in extreme cold or heat. Even the extremes of toxic atmospheres is able to be endured because the character's system is completely sealed. Incoming air for the cooling system is filtered through bio-technical filters and any oxygen present is infused into the character's closed-loop air supply. If no oxygen exists in the atmosphere, the character cannot breathe of course.

The implant also reclaims perspiration and urine into pockets throughout the body. A series of bio-technical filters cleans impurities out of the pockets and

introduces the cleaned water into the body's blood stream.

The environmental implant drains energy units depending on how harsh the environment is. The implant drains a lot of energy from an energy source in extreme environments. In temperate, non-toxic and moderately-dense environments, the implant has no drain on its energy source.

ENVIRONMENTAL IMPLANT ENERGY DRAIN TABLE

Temperature	1 EU per
171 to 220 degrees c	Turn
121 to 170 degrees c	10 minutes
71 to 120 degrees c	30 minutes
40 to 70 degrees c	Hour
-51 to 39 degrees c	--
-21 to -50 degrees c	Hour
-51 to -100 degrees c	30 minutes
-101 to -150 degrees c	10 minutes
-151 to -200 degrees c	Turn

Toxicity	1 EU per
None	--
Trace	Hour
Moderate	30 minutes
Severe	10 minutes
Lethal	Turn

Atmospheric density	1 EU per
Very thin	10 minutes
Thin	Hour
Moderate	--
Dense	Hour
Very dense	Turn

For instance: in 100 degrees, moderate toxicity, dense atmosphere, the implant drains 1EU per 30 minutes (temperature) + 1EU per 30 minutes (toxicity) + 1EU per hour (density)... or 5 per hour.

The character's sealed environmental implant can self-seal damaged skin. Additionally, the implant is actually fully compatible with any dermal or subdermal bionic implants and conventional defensive suits and screens.

A character with an environmental implant who also wears an environmental or vacuum suit will use the suit's statistics until it is depleted or removed, then will begin draining the character's own biobattery or source as the implant takes over.

HOLO-FIELD IMPLANT

Type: cybernetic, complex cost: 100,000 CR

The character receives microprojectors implanted at strategic locations on his body, carefully concealed. The implant is able to project a holographic image over the character, allowing him to disguise himself as someone else.

The implant's central system is located in the character's torso. It interfaces with the character's

brain and stores several pre-programmed very typical appearances. A small microdisk slot exists in the character's wrist allowing additional identity programs to be inserted. These identity microdisks are compatible with those used in conventional holo-fields.

It requires a half INT check to see through the very convincing façade projected by the holo-field implant.

The holo-field implant requires a power source such as a biobattery or external connection via emergency jack or slot. The implant drains nothing while unused, but while used it drains 1 EU per minute of operation.

HOLO-FIELD SCRAMBLER IMPLANT

Type: cybernetic, complex cost: 150,000 CR

The character receives implants in his hand that allow him to extend his thumb and forefinger and mentally cause a broadcast of a specially modulated white noise, designed to momentarily scramble holo-fields. It forces any three dimensional hologram to flicker and intermittently fail, revealing its nature to all who observe. It momentarily causes anyone behind a holo-field to have their true identity shown, and reveals falsely projected walls and other things. It is a bane to espionage agents.

The range of the broadcast is only ten meters, so the character must get up close to activate the implant. Activation of the implant drains 2 EU from its energy source (a biobattery or external connection via emergency jack or slot).

In all respects, this implant functions identically to the hand-held holo-field scrambler found in the pages of Starfrontiersman#5.

LASERHAND IMPLANT

Type: cybernetic, complex cost: 60,000 CR

This implant places the inner workings of a laser pistol in the character's forearm, wired to emitters in the knuckles of that hand. The character can mentally send the command to fire the laserhand once per turn (or up to three times per turn with an all-out-attack, as per all semiauto weapons), as long as he has EU to power it. Unlike the autofire arm implant, there is no need for a retractable or concealed forearm slot. The character closes his fist as he fires, and the laser emits from it in a wide beam.

To power the laserhand implant, the character needs some sort of energy source such as a biobattery or emergency slot/jack. It drains between 1 and 10 EU (the character chooses the setting, just like a conventional laser pistol) from the power source each time the weapon is fired. It causes energy damage, a number of dice equal to the setting chosen for the energy drain. Using the weapon successfully requires levels in the beam weapons skill, but of course it can be used unskilled if the character possesses no such levels.

Statistics for the laserhand implant are identical to those of a laser pistol.

REFLEX IMPLANT

Improved	type: cybernetic, moderate	cost: 1,000,000 CR
Cutting-edge	type: cybernetic, complex	cost: 2,000,000 CR

This implant is a more severe version of the basic reflex bionic implant found in the bionic implant section above.

This version requires more power than the character's body can produce. The improved version drains 1 EU per hour, but enhances the character's RS score by +30 (which in turn adds +3 to initiative rolls). The cutting-edge version drains 2 EU per hour and enhances the character's RS score by an amazing +40 (and +4 to initiative).

Characters with this implant cannot stand still. Their hands shake if they don't concentrate on them – their eyes dart about. A perceptive character knows when someone they observe is equipped with a cybernetic-grade reflex implant.

ROBOTIC ARM

Type: cybernetic, complex cost: 100,000 CR

A robotic arm is not a simple prosthetic. It is not meant to replace a missing or defective arm. Characters wishing to replace an arm lost to damage or worse should consider a prosthetic limb. This implant is meant for combat and action. Normally, the robotic arm has very little energy drain from its biobattery source (around 1 EU per hour), but when used in this underpowered way the character uses his normal STR and DEX scores.

The real benefit of the robotic arm is realized when the character mentally routes additional power to the implant's servomotors. During any given turn, a character can spend 1 EU, 2 EU, or 4 EU to the robotic arm. He can continue routing power each turn until he runs out of EU or until he wishes to stop boosting his STR and DEX.

- » For 1 EU, the character's STR score is considered 10 points higher and his DEX score is considered 5 points higher for actions attempted using the robotic arm.
- » For 2 EU, the character's STR score is considered 20 points higher and his DEX score is considered 10 points higher for actions attempted using the robotic arm.
- » For 4 EU, the character's STR score is considered 40 points higher and his DEX score is considered 20 points higher for actions attempted using the robotic arm.

A character can have both arms replaced by robotic arms, and each will drain 1 EU per hour. When boosting the arms by routing power, each can be boosted (or not) individually.

Robotic arms have another benefit. The arm can be given a single implant (one which is designed to be implanted in the hand, wrist, fingers, or forearm) and

that implant does not count against the number of implants the character is permitted (see dangers of implants, above).

For instance, Kergan has a LOG and STA of 55. This means he may have 6 bionic implants before being fatigued, and may have 6 cybernetic implants before risking rejection. He endures the surgery to replace his right arm with a robotic one. In this arm, he implants a cyber-talon (a bionic implant). The cyber-talon doesn't count towards his bionic maximum, since it interfaces to his arm rather than his brain and nervous system.

Robotic arms do not heal naturally. If damaged, a character with the robotics skill must work on the damaged parts to repair them. Consider a robotic arm to require 1d10 hours worth of repair in order to make it functional again once it has been rendered useless.

ROBOTIC LEG

Type: cybernetic, complex cost: 100,000 CR

A robotic leg is not a simple prosthetic. It is a powerful robotic leg designed for augmentation, combat, and action.

Each replaced leg drains 1 EU per hour. If only one leg is replaced, the character's movement rates (walking, running, and hourly) are multiplied by 1.5. If both legs are replaced, the character's movement rates are doubled. This multiplier also applies to leaping and vaulting distances.

Like the robotic arm, the robotic leg can receive an implant and that implant will not count towards the implant count of the character. See the example for robot arm, above.

Robotic legs do not heal naturally. If damaged, a character with the robotics skill must work on the damaged parts to repair them. Consider a robotic leg to require 1d10 hours worth of repair in order to make it functional again.

ROBOTIC TORSO

Type: cybernetic, complex cost: 1,500,000 CR

This implant is a full robotic conversion for a character. It is highly invasive, replacing massive amounts of tissue, flesh, and bone with durable polymers, plastisteel, and hydraulic fluids.

A character can only get a robotic torso after first receiving both robotic arms and both robotic legs. A character cannot have a robotic torso with flesh and blood limbs. Once this is complete, the character is basically a human head on a robot body. He has dumped huge portions of his humanity and will never get it back.

The largest benefit a character has with a robotic torso is that his body points are now equal to twice his STA score unlike other (more flesh and blood) characters. Additionally, he can receive up to 10 kg worth of integrated gear by paying an additional 10% as an integration fee. These integrated pieces of equipment

are not considered cybernetic or bionic implants. They are simply integrated pieces of equipment in much the same way that robots can have integrated equipment.

The character's robotic components no longer heal naturally. Assume all damage the character receives goes to his robotic torso. Once damaged, a character with a robotics skill must work on the damage to repair it. A roboticist can heal 1d10 STA per hour spent working on the cyborg.

A robotic torso drains 1 EU per hour from a biobattery or from a connection to an external energy source through an emergency jack or slot.

ROCKETHAND IMPLANT

Type: cybernetic, complex cost: 20,000 CR

The character with this implant has a loading slot in his elbow. He slides gyrojet rockets into this slot one at a time until there are ten loaded and no more will fit. He is now fully loaded.

With a mental command, the business-end of a gyrojet weapon juts out from the character's open palm in much the same way as the autofire arm implant. The weapon can be aimed using the gyrojet weapons skill. With a thought, the weapon fires. While shooting these self-propelled rockets at enemies, the thrust exhaust from the ammunition is vented out through slots in the forearms. When done shooting enemies, the character issues another mental command and the weapon retracts back into his hand. It drains 1EU from a biobattery to extend or retract.

In all ways that matter, this weapon is statistically identical to a gyrojet pistol. Note that the weapon is useless within 3 meters, as the rocket has yet to achieve a velocity that is effective.

SONIC CLAW

Type: cybernetic, complex cost: 30,000 CR

A character with a sonic claw has a large emitter recessed into his forearm, just below his wrist, on the under-side. Upon mental command, it pops out and folds forward, showing a sonic emitter which juts through a fold in his flesh. A second mental command turns on the claw, which is a long nearly invisible humming blade of pure sonic energy ready to wreak havoc upon unsuspecting foes.

While the implant is activated, the wrist is interlocked from allowing the hand to fold into the blade of this one meter long weapon. If the body calculates that the blade is about to cut through the wielder's own body part, the blade automatically shuts off to prevent self-damage and re-activates once the hand moves past the body part. A great deal of effort was made to protect the recipient of this dangerous implant.

In all respects, the sonic claw is treated as if it were a sonic sword as described in the Alpha Dawn manual. Using the sonic claw successfully requires levels in the melee weapons skill, though of course it can be used

unskilled. Each successful hit of the blade drains 2 energy units from the character's biobattery or from the power source attached to his emergency power jack or slot. Unlike the sonic talon, this implant does not come with compartmentalized power options.

SONIC TALON

Type: cybernetic, complex cost: 5,000 CR

A character with a sonic talon has on large emitter on the back of his hand, slightly upraised to aim forward. When he clenches his fist to push on the pressure sensors while he sends a mental command to the implant, a barely visible sonic blade is projected. It is in most respects identical to a sonic knife as found in the Alpha Dawn game book. It drains 1 energy unit per hit from the character's biobattery or emergency jack/slot. Using the sonic talon successfully requires levels in the melee weapons skill, though of course it can be used unskilled.

Unlike some other implants, the sonic talon can be powered individually by inserting a 20 EU powerbattery into the character's forearm. A quick mental command can switch the power routing from his biobattery or emergency jack or slot (if equipped with one) to this power battery and back.

SONICHAND IMPLANT

Type: cybernetic, complex cost: 50,000 CR

This implant places the inner workings of a sonic stunner in the character's forearm, wired to emitters in the fingertips of that hand. The character can mentally send the command to fire the sonichand once per turn, as long as he has EU to power it. The fingers must be kept close together, and the thumb must push on a pressure sensor to the side of the index finger. This coupled with a mental command from the brain causes the release of the sonic energy.

To power the sonichand implant, the character needs some sort of energy source such as a biobattery or emergency slot/jack. It drains 1 EU from the power source each time the weapon is fired. The weapon causes only stun damage. Using the weapon successfully requires skill in beam weapons, but of course it can be used unskilled if the character possesses no such levels.

SUBDERMAL PLATING

Security-grade type: cybernetic, complex cost: 150,000 CR
Military-grade type: cybernetic, complex cost: 400,000 CR

The character's skin is replaced by synthetic calcified plating, reinforced with calloused layers of fibrous membranes. The implant is obvious; the character's entire body appears to have a flesh-covered suit of medieval armor. The plating isn't totally hardened; the character can still "feel" things, though he feels them to a much lesser extent.

Although the armored skin itself has no power drain (thus requires no biobattery), the armor has a negative effect on the character's natural ability to moderate

heat. The body cannot sweat – and it traps in heat more than it should. The end result is that the plating is not all you get when you receive this implant. Along with the defensive layer comes a variant cooling system to help keep your character from having a heat stroke when he's being active.

The internal cooling system doesn't draw much power normally. Assume each day drains 1 EU from the character's biobattery or emergency source jack or slot. When no power source exists, the character can still behave normally but is considered exhausted/fatigued (-10 to all rolled actions) until he rests sufficiently. A character with subdermal plating and no power source who engages in too much physical activity (as determined by the Referee) might have to make a STA check or pass out from heat exhaustion.

» **Security-grade subdermal plating** acts as 10 points of damage reduction against all damage types. This means all attacks aimed at the character lose 10 points of effectiveness before they affect the character's current STA. This is extremely protective armor – the character doesn't worry too much about normal bullets or low-power lasers. The appearance looks like the character has extra-thick skin with some sections which seem to have plates which overlap other sections. Although it can be concealed under loose-fitting clothing (such as an overcoat), most people viewing the character will realize he has some sort of protective layer to his flesh.

» **Military-grade subdermal plating** is for extreme military operations and provides 20 points of damage reduction against all attacks. The character is nearly immune to normal bullets and low-powered lasers. The appearance looks monstrous. The skin has heavy-looking plates covered by thick calluses. The flesh-plates overlap and cause deep fleshy pits and folds which must be cleaned regularly or they take on odors. The effect cannot be concealed. Even if the character wears a large overcoat, the way the character moves along with all the bulky protrusions alerts all viewers that the character is heavily – if naturally – protected.

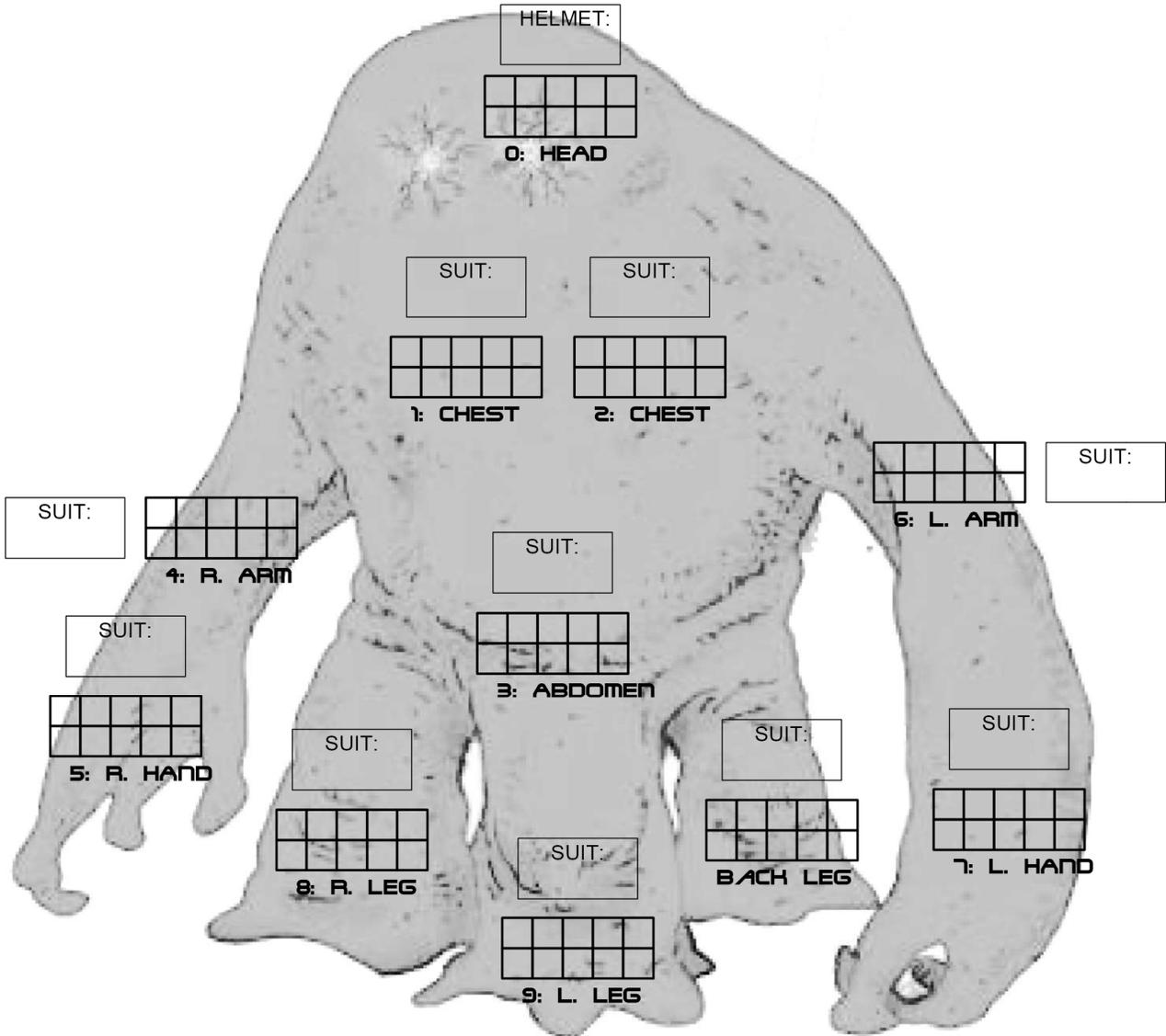
All subdermal plating (security or military) is bulky and heavy and can restrict mobility. Characters with less than 70 STR will be penalized by -10 on all DEX and RS checks (and any skill checks where mobility plays an important role).

Subdermal plating is a defensive implant. If the character layers his other types of protection over this, only the topmost layer protects the character until it depletes. This implant is incompatible with harmonic subdermal gel implants, but can be used with either dermal chrome or dermal infrared treatment (but not both).

Author's note – this system was derived from the work-in-process cybernetics/bionics rules designed for the up-and-coming FrontierSpace™ role-playing game and has been adapted for Star Frontiers: Alpha Dawn. Although these implants are expensive and designed for advanced characters, players who wish to start game play with implants might be permitted to with permission from the Referee; though I'm sure he'll balance it with some drawback!

DRALASITE ABLATIVE DAMAGE CHARACTER _____

DEFENSE SCREENS ALBEDO GAUSS INERTIA



BLUDGEON

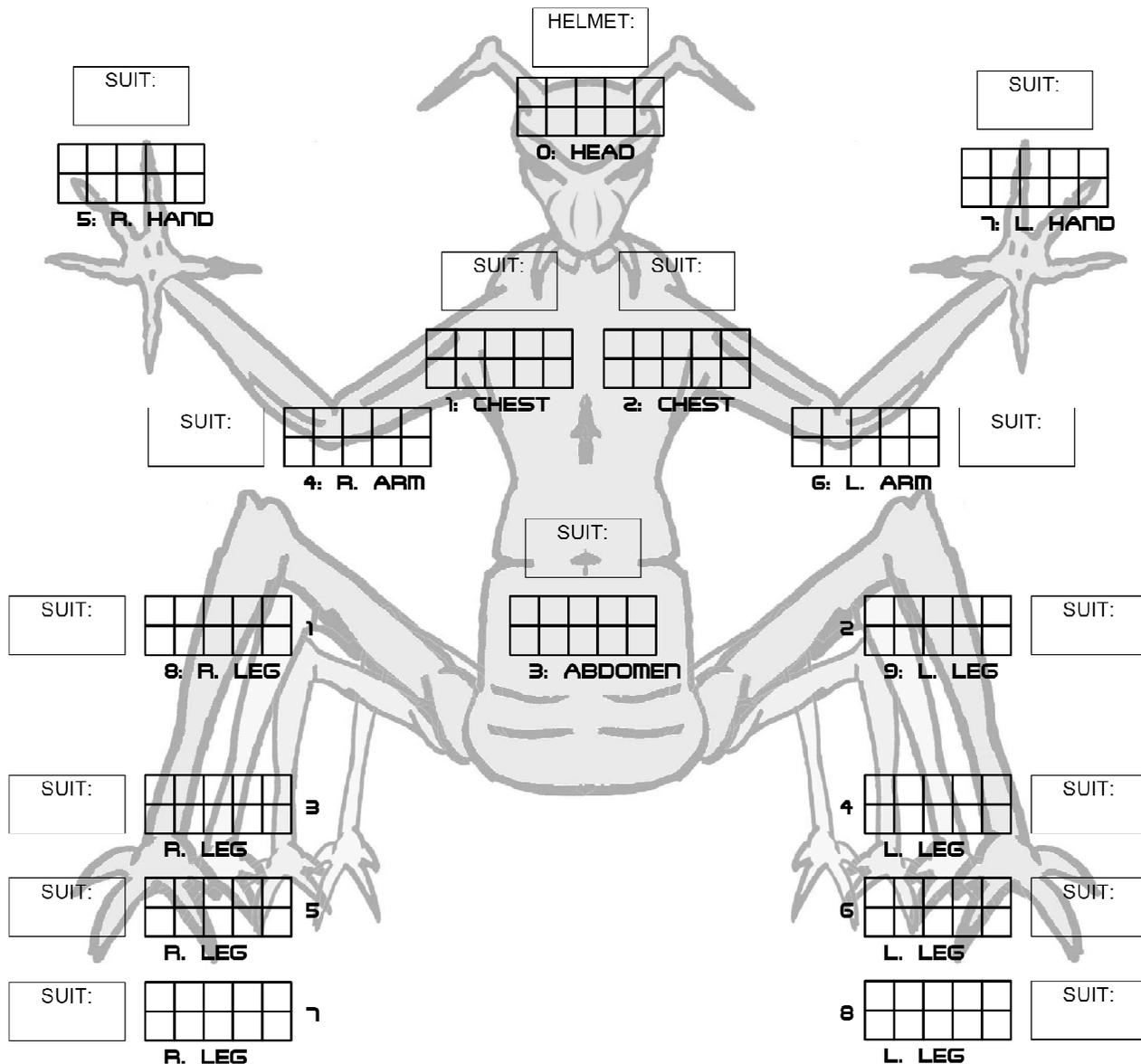
- RECORD IN BOXES.
- EACH LOCATION HEALS ONE PER HOUR.
- WHEN THE LAST IS FILLED WITH , THE AREA IS NUMBERED.
- WHEN LOCATIONS 0,1,2, OR 3 ARE NUMBERED, THE CHARACTER IS UNCONCIOUS.
- WHEN LOCATIONS 4,5,6, OR 7 ARE NUMBERED, THAT LIMB CANNOT BE USED.
- WHEN LOCATIONS 8 OR 9 ARE NUMBERED, MOVEMENT IS HALVED.
- WHEN LOCATIONS 8 AND 9 ARE NUMBERED, MOVEMENT IS QUARTERED.

WOUND

- RECORD IN BOXES BEFORE RECORDING THEM IN BOXES
- ALL LOCATIONS HEAL ONE PER DAY
- WHEN THE LAST IS FILLED WITH , THE AREA IS THRASHED.
- WHEN LOCATIONS 0,1,2, OR 3 ARE THRASHED, THE CHARACTER IS DEAD.
- WHEN LOCATIONS 4,5,6, OR 7 ARE THRASHED, THAT LIMB CANNOT BE USED.
- WHEN TWO LEGS ARE THRASHED, MOVEMENT IS HALVED.
- WHEN MORE THAN TWO LEGS ARE THRASHED, MOVEMENT IS QUARTERED.

VRUSH ABLATIVE DAMAGE CHARACTER _____

DEFENSE SCREENS ALBEDO GAUSS INERTIA



BLUDGEON

- RECORD IN BOXES.
- EACH LOCATION HEALS ONE PER HOUR.
- WHEN THE LAST IS FILLED WITH , THE AREA IS NUMBERED.
- WHEN LOCATIONS 0,1,2, OR 3 ARE NUMBERED, THE CHARACTER IS UNCONSCIOUS.
- WHEN LOCATIONS 4,5,6, OR 7 ARE NUMBERED, THAT LIMB CANNOT BE USED.
- WHEN TWO LEGS ARE NUMBERED, MOVEMENT IS HALVED.
- WHEN MORE THAN TWO LEGS ARE NUMBERED, MOVEMENT IS QUARTERED.

WOUND

- RECORD IN BOXES BEFORE RECORDING THEM IN BOXES
- ALL LOCATIONS HEAL ONE PER DAY
- WHEN THE LAST IS FILLED WITH , THE AREA IS THRASHED.
- WHEN LOCATIONS 0,1,2, OR 3 ARE THRASHED, THE CHARACTER IS DEAD.
- WHEN LOCATIONS 4,5,6, OR 7 ARE THRASHED, THAT LIMB CANNOT BE USED.
- WHEN TWO LEGS ARE THRASHED, MOVEMENT IS HALVED.
- WHEN MORE THAN TWO LEGS ARE THRASHED, MOVEMENT IS QUARTERED.

GAME REPORT

By Richard "Shadow Shack"
Rose

STAR FRONTIERS: THE DOMINION

By Richard "Shadow Shack" Rose

Campaign background:

Set 45 years ago in Federation Year:111.

Magnate General Yan-Soon Shea-Dow, alleged half clan brother to Streel's Hilo Hadow (who claims no relation) overtakes Histran in the Scree Fron system and establishes a sovereign governing presence via a blockade of warships staffed with well trained militant crews. A civilian confederation of independent freight haulers working in tandem with neighboring Hakosoar militia craft manage to retake the world. Yan-Soon escapes, only to threaten Clarion three years later. What proves to be a quick defeat led by the Clarion Royal Marines ends up being a feint, Yan-Soon's forces quickly take the outpost world of Laco the following year and establishes the Sovereign Domain Authority, a militant dictatorship that announces no allegiance to the UPF.

The trade routes to Truane's Star, Zebulon, and the Rim are now effectively blocked off, however Streel manages some sort of back door escort service for civilian craft wishing to trade with these worlds as well as capitalizing on their own trade with the rest of the Frontier. The Shea_Dow/Hadow relation becomes a huge conspiracy theory at this point, but nothing can be done as UPF forces are driven back to Prenglar with each illegal attempt at retaking Dixon's Star, as teh UPF is forbidden to interfere with local government matters so the skirmishes are small. SDA officially secedes from the Council of Worlds and UPF ships are given the green light for daring raids. These meet with similar results: defeat.

By FY:72 the UPF begins to receive delivery of their first dreadnaught vessels under the FY:64 passage of Operation: Dreadnaught, a bill permitting larger than battleship class warships. Feeling an upper hand against SDA craft, they attack laco once more only to discover that Yan-Soon has already commissioned his own fleet of dreadnaught carriers and cruisers. The SDA war machine is now at full force, sweeping through the Frontier leaving a wake of destruction. The UPF declares war against the Sovereign Domain Authority in FY:75.

The next three years find the yazirian systems (Araks, Athor, Gruna Garu, & Scree Fron) overtaken by SDA forces, with garrisons, warships, and commanding staffs left behind to keep the peace. Two years later

the UPF loses more ground via the vrusk systems (9K'aken-Kar, Kizk-Kar, & K'tsa Kar) as well as Madderly's Star. By FY:81 Prenglar falls, and Cassidine surrenders shortly afterwards. With ten systems under SDA control, including the two Capitol & Task Force locales, the UPF quickly falls apart and the Council of Worlds is dissolved.

The following thirty years brings about another Sathar War against SDA forces, who establish a strong military presence and not only defeats the worms but traces them back to possible homeworld systems. Pirate factions are quickly eliminated as well, falling with efficiency to the dominating SDA forces. By FY:90 SDA forces are dispatched to a Sathar outpost world in their own homeworlds, the worms plea for a peace treaty yet manage to mount scores of warships to drive SDA back. Invading the Sathar homeworlds ends up being a stalemate; SDA puts it on the back burner for the time being.

Year	Event
64	Operation: Dreadnaught legislature passed.
72	First Dreadnaught's are received.
75	UPF declares war against the Sovereign Domain Authority
81	Prenglar falls. Cassidine surrenders shortly afterwards.
90	SDA target Sathar outpost but are driven back by the worms. Over the next year the SDA stalemates with the Sathar homeworlds.
91 - 96	Malco surfaces on Volturnus.
97	SDA establishes a new garrison on Volturnus to watch MalCo.
110	SDA maps the Rim side of the Xagyg Dust Nebula from Capella to Klæok.
111	Current year of the Grand Celebration.

MalCo Enterprises resurfaces on Volturnus via legitimate business operations both on the surface and in the orbital station. SDA does not recognize them as a threat, but is aware of their history and MalCo is under close surveillance. Rumors of former UPF Loyalists begin to surface. By FY:97 SDA establishes a new garrison on Volturnus to watch MalCo. By the turn of the century SDA begins mapping the Rim side of the Xagyg Dust Nebula, completing said map from Capella to Klæok by FY:110. Eventually the Volturnus Garrison is removed during that same year with hopes that MalCo will become more relaxed and tip their hand at suspected smuggling operations that have plagued the Frontier in recent years.

Which brings us up to date, FY:111 --- The Grand Celebration, commemorating 30 years of the SDA treaty is planned for the entire year. Gala social functions, parades, and celebrations are planned on every planet under SDA control and even some in the Rim. However, former UPF loyalists have risen in strength and numbers. The first publicized rebellion against the SDA is carried out by Princess Leotia Valentine XXII as she smuggles valuable SDA data obtained by the Clarion Liberation Party and manages to make it all the way to Zebulon before being discovered. She is captured, but her Zebulon contact is never found. SDA speculates that this contact may hail from a Rim system.

CAST OF CHARACTERS



Captain Jason Henry "Hank" Siegar (mH), former engineer for PGC/Trans Travel co-owned Rayax Transport Shipwrights and ex-SDA fighter pilot, co-owns the merchant scout SS Corona Phoenix, a ship with a rich history including assaults against SDA in Histran under the original owners.

Tarbikal (mV), former agro-world ranch hand turned pilot/astrogator, co-owns the Phoenix with Siegar.



Terc and Cret Krenn (mY & fY respectively), former SDA militia soldiers, yazirian clan brother and sister duo hired on as gunners by Siegar and Tarbikal

Naralos (mD), chief technical and engineering officer for the Corona Phoenix. Rich history serving under numerous SDA and civilian spacecraft.

Rastefir "Rastie" Stath of Clangeddin Clan (mI), Rim citizen who migrated to the Frontier in search of a more rewarding lifestyle, hired on as a jack of all trades by the Phoenix crew.

Valicia Mastis (fH), ex-pirate and fighter jockey, currently assigned to escort the Corona Phoenix with her privately owned I-76 Enforcer heavy fighter "SS Sentinel". Wears an eye patch over her sealed left eye socket, an injury acquired during her piracy days.



Katrina Siamilla (fL), feline-like humanoid hailing from beyond the Frontier, astro-gunner assigned to the Sentinel.

SS Corona Phoenix, merchant scout --- class:3 armed trade vessel under license by MalCo Enterprises. Includes four MR-2 series maintenance robots

SS Sentinel, fighter --- class:2 interstellar heavy assault fighter under license by MalCo Enterprises. TR-3 "Tart" MR-3 series maintenance robot included in aft maintenance bay

CAMPAIGN LOG 01

The entire group (save for Naralos, who is running late) has met at "Britmoll's Tavern: IX" located in Port Lavakos, Volturnus (Zebulon). MalCo has offices on the commercial decks of Zebulon Station as well as the surface, including one here in Port Lavakos. Port Lavakos was once home to Mercenary Starbase, a military organization funded by Pan Galactic and operating under Spacefleet & Star Law charter as a patrolling presence to assist both of the former interstellar organizations. Once SDA disbanded them (MS and Strike Force NOVA were the final factions attempting to preserve the UPF during SDA's decade of destruction), MalCo swooped in to establish a legitimate business stronghold.

Britmoll's Tavern - IX is the latest expansion of a pub chain owned by Kilian Britmoll, a huge lumbering hulk of a human. Headquartered in Triad, Britmoll's Taverns expanded to the capital of every major world in the Frontier and this is his first tavern in a lesser populated world, as such he is personally seeing to the grand opening. Britmoll sports a rather oversized bionic left arm, and has been known to dispatch his enemies by hoisting a sonic devastator with it (sans tripod mount!). Alas, Killian isn't the young buck he once was (he's 89 years old now, and officially retired from such work), but loves to spin yarns of glory days with his customers.

BT-9 just opened in recent months and your group has enjoyed Britmoll's hospitality. It has become a haven for adventurers and MalCo operatives alike, along with various other sorts of riff raff including hovercycle gangs, ex-cons, former pirates, and even the occasional ex-UPF or former StarLaw types.

Assisting him as manager, learning the ropes of his business, is a comely but aging female yazirian named Jeticia Nye, who simply prefers to be called Jeti. She has a history



with Volturnus, assisting the second exploration mission that eventually liberated its natives from a Sathar invasion long ago. Most of her Volturnus comrades from back in the day have established businesses in Port Lavakos or Zebulon Station, so between her and the owner information can be had. For a price. And neither enjoys hosting violence of any manner within the confines of their respectable establishment.



SDA Fleet on maneuvers

* Artwork by GJD

The group is once again enjoying some much needed downtime after running a series of cargoes under MalCo charter, including smuggling some small arms into the Rim and a recent delivery of SIX (Synthetic Ixiol) and Methadose shipments that will hopefully undermine SDA forces around the Frontier. MalCo didn't care much for the UPF, but SDA is even worse. If SDA troops & operatives can get themselves hooked on narcotics, then open season can't be too far behind!

The Phoenix and Sentinel crews are indulging in some of the tastier plates and beverages offered at BT-9, along with the usual disagreements between the highly spirited ex-pirate Valicia and everyone else. Jason and Tarbikal head to the bar for refills, and soon afterwards Naralos arrives in the thick of the bickering to receive a fresh dose of what the rest have been digesting. Embarrassed by it all, Jason finally shouts out from the bar for everyone to take it down a notch. This, of course, has attracted the watchful eye of man-mountain Killian Britmoll behind the bar. Jason gets down to business by fraternizing with the yazirian barkeep who happens to know a former acquaintance of Siegar and follows by attempting to hustle something from the bionic barkeep, stating that he captains a small, fast, and armed light freight hauler and has an allied heavy fighter escort as well.

A hearty grin crosses the wrinkled face of Kilian Britmoll. He bursts out with laughter, and then gets his game face on. "Back in the day I might have double dipped on this

one. But seeing as you an' my subordinate here have a mutual friend, and you saved me the effort of discharging my favorite toy on your own subordinates...for the mere cost of a pint of 10 year old Minotaurian Scotch I just might have what you're looking for." Jason responds with "I swear, that's half my job --- just keeping them in line when we're in port. As for that bottle of scotch, you've got a deal." Jason counts out 100 cr and lays it on the bar, "It never hurts to have a fine drink around to calm the nerves and relax. Or to celebrate with after a successful run," he adds with a grin. Killian smiles and pops the seal off a dust covered plasti-container of Minotaurian Scotch. He pours you a pint (or technically, a half-liter) and helps himself to a shot of it as well. He swigs the shot down. Placing the mug down on the bar in front of you, he raises his organic arm and activates his chronocom. You hear some indistinct clicking and Britmoll answers "Yeah, I got someone here that might suit your needs. A light freighter captain who runs with a heavy fighter escort. Looks like his crew is here with him. C'mon down, I'll introduce the two of ya." Some more muffled sounds and the call is finished.

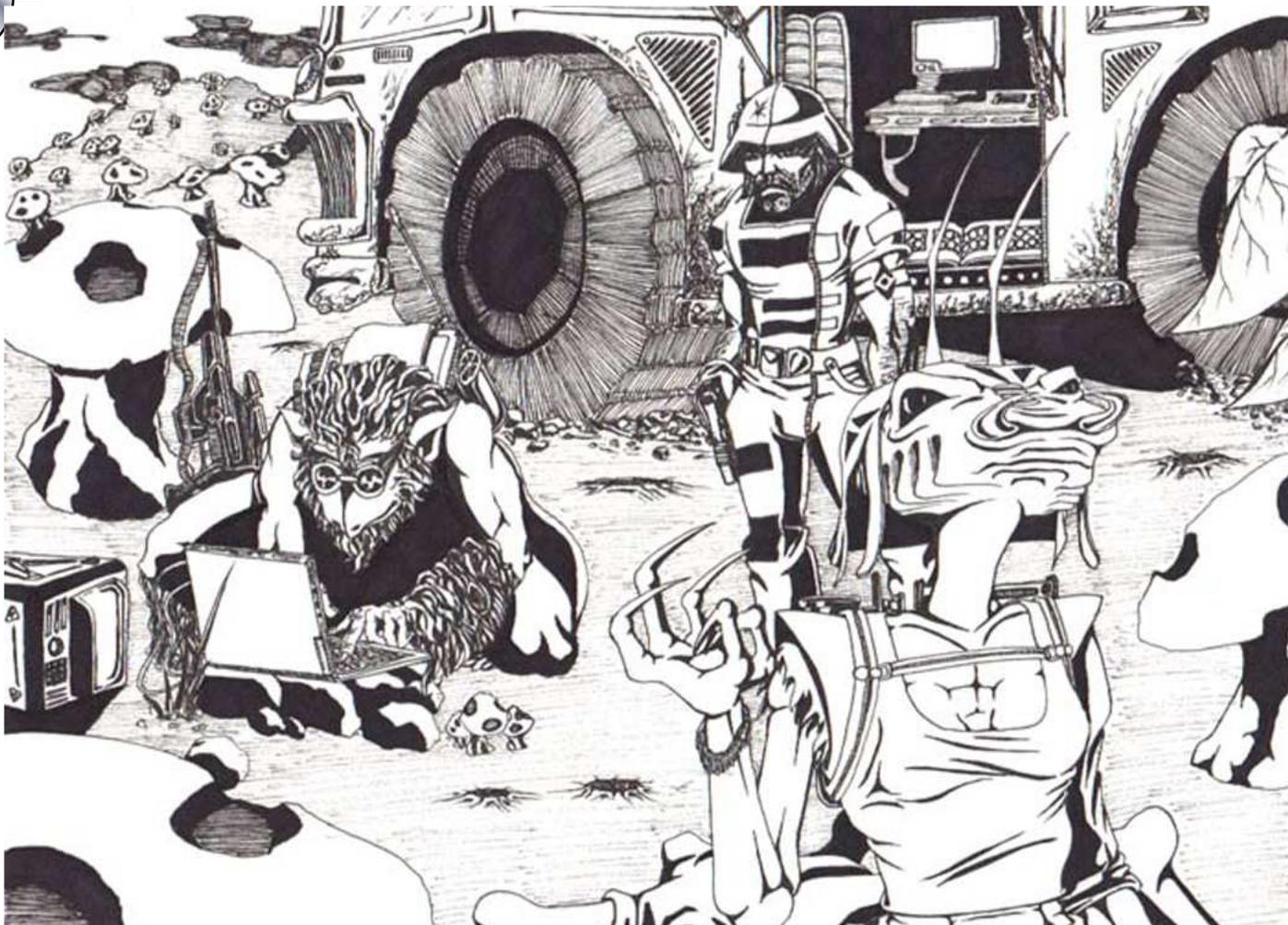
The bar man grins and says "A potential customer will be here soon. I'll send him your way when he gets here." He then

lumbers off to the opposite end of the bar to assist a dralasite that just arrived. Naralos seems to recognize this particular dral as a MalCo Liason, and waddles over to commence some conversation by offering a drink to his kin. The two begin bellowing away in the dralasite language, and after a few exchanges Naralos bids him farewell and returns to the group. By now Jason and Tarbikal have also settled down at the group's table. Naralos reports that the "big boy" (Malthar) was quite impressed with their last run, and that the liason will check to see if there's any loads available for departure.

Half an hour later a vrusk enters and greets the bionic barkeeper, who in turn points his mechanical finger at the group assembled at the center table. The limb drops down below the bar and you hear a few items crash to the floor, Britmoll curses out loud and disappears into the back room. The vrusk is older in appearance, grizzled and a bit slower than the younger ones you've seen. Tarbikal estimates him to be around 70-80 years of age. He is wearing some loose casual attire, but through the folds you see a well worn military skeinsuit underneath. His demeanor is the same as any other vrusk though; all business, and he gets right down to that point.

"Greetings, ladies and gentlemen," he says in Pan Galactic, nodding with respect to the female human, female yazirian, and cat-like humanoid. "I'm told you have a ship that may suit my needs. I'm looking for some discreet passage deep into the Rim, Klæok to be precise."

(To be continued..)



As the Star Rovers begin basic data collection on a new world... Bel'etrix curses in common vrusk, "Vit'kt'Il~. How could they get lost! Everyone had the drop coordinates. Zimeth, can you track their transponder source?"

The Yazirian a computer data analyst attempts to sync his portacomp to a geosync uplink. "Give me a nanosec Bel. Finding telemetry data isn't like searching Gobbelsync for a spacers rest."

Kragg the human just stands itching to get exploring, "They know the rendezvous point. Let's get going."

Bel'etrix, "Kragg you just want to try out your new blaster in case we get caught without a carapace."

"Hey, you hire me for muscle and I'm the bloke to oblige."

Zimeth – Technological (Computer/Robotics specialist)
Yazirian Male, Right handed, 1.9m, 72kg, Night vision, gliding, battle rage 10%

Move: 10m/30m/4km
STR/STA 45 DEX/RS 55
INT/LOG 65 PER/LDR 50
PS: +3 IM: +6

Skills: Computer 2, Robotics 1, Beam 3
Equipment: Envirokit, laser pistol, vibroknife, sungoggles, water pack, survival rations x5, everflame, holoflare, digital compass, advanced chronocom, all-weather blanket.

- » Laser pistol; +6; 48%; I:1d10/SEU; 20SEU ROF:2 Range:20m
- » Vibroknife; +11; 28%; I:2d10; 20SEU/1per hit ROF:1

Bel'etrix – Biosocial (Environmental specialist)
Vrusk Female, 1.6m, 69kg, Ambidexterity, Comprehension 30%

Move: 15m/35m/6km
STR/STA 50 DEX/RS 60
INT/LOG 70 PER/LDR 45
PS: +3 IM: +6

Skills: Environmental 3, Medical 2, Melee 3
Equipment: Duraraft, Environtent, sonic sword, sungoggles, water pack, survival rations x5, everflame, holoflare, digital compass, advanced chronocom, all-weather blanket.

- » Sonic sword; +6; 75%; S:5d10/SEU; 20SEU/2 per hit ROF:1

Kragg – Military (Ex-Pirate)
Human Male, 2.3m, 80kg,

Move: 10m/30m/5km
STR/STA 65 DEX/RS 70
INT/LOG 45 PER/LDR 50
PS: +3 IM: +6

Skills: Beam 3, Medical 1, Gyrojet 3, Melee 1
Equipment: Environtent, all-weather blanket, survival rations x5, gyrojet pistol, sonic stunner, knife x2.

- » Gyrojet pistol; 65%; I:2d10; Ammo:20; ROF:1; Range: 10m
- » Sonic stunner; 65%; Stun; 20SEU/2 per hit; ROF:1; Range: 15m
- » Knife; 50%; I:1d10; ROF:1; Range: 5m

Ryan Baker - The great thing about Star Frontiers is that it's part action/adventure, but also part mystery/exploration, which combined make for some fantastic story opportunities.

EQUIPMENT

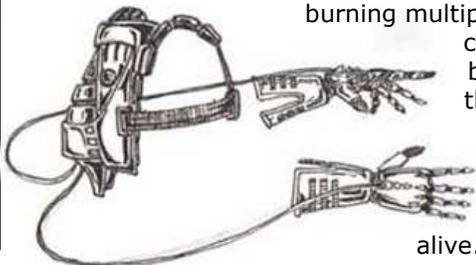
FLAMETHROWER GAUNTLETS

By Ryan Baker

Flamethrower Gauntlets

Cost:	700Cr
Wgt:	2kg
Damage:	3d10 single gauntlet, 4d10 in a burst
Ammo:	10 bursts (each gauntlet)
Rate:	1
Defense:	Inertia
Range:	5/10/20/30/50
Fuel backpack:	50Cr

Description: Flamethrower Gauntlets are a fearsome weapon in short range, close quarters combat. Each gauntlet is capable of delivering several burning streams of flame to an area, burning multiple opponents caught in the blast. Characters that are caught without cover or nowhere to escape are quickly burnt alive.



The blast of flame is triggered first by keying a safety release on each gauntlet with the user's thumbs. Once the safety is deactivated, another thumb trigger is used to fire a momentary blast, or to sustain the flame's activation. Both hands can produce flame, though penalties for firing two weapons and offhand use still apply. The gauntlets require both hands to be free to use, but are nimble enough that other activities are not significantly affected due to wearing them.

Each gauntlet fires a burst of flame causing 4d10 fire damage to a single opponent. Like other burst weapons, an area of up to 10 meters wide can be targeted, adding 1d10 damage per target in the area, requiring only a single roll to hit all of them. The damage total is divided between the characters caught in the area. RS checks may be attempted for those with nearby cover or for those willing to go prone resulting in half damage. Inertial suits and screens defend against the flamethrower gauntlets the same way they defend against other explosions and incendiary attacks. Any character that takes more damage than half his stamina score is completely incapacitated do to burn wounds.

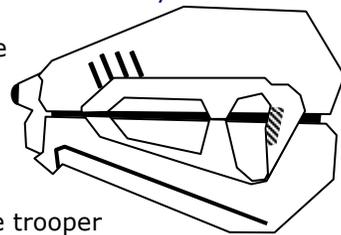
Like other concealable weapons, some systems may have significant laws against carrying or owning these weapons outright.

Reloading takes 2 turns for each gauntlet and requires refilling the liquid fuel tanks and the compressed nitrogen canister. Both the inert nitrogen and liquid fuel can be purchased throughout the frontier at common supply outlets.

WARTECH'S LWS

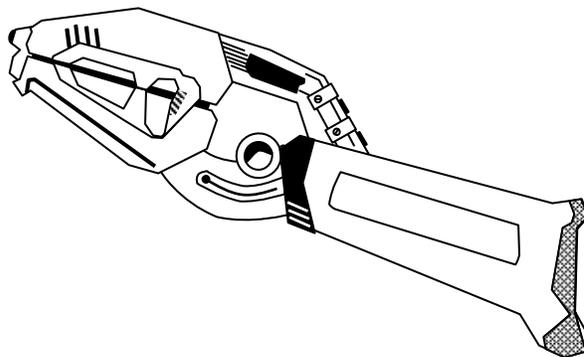
By S.E. Roberts

WarTech knows how to make a weapon, and their new designer Mitc Ramos knows how to make it in an out standing package. This is WarTech's SE-9 laser weapon system made for the trooper that needs a weapon that can perform a variety of functions. It is a laser pistol that uses a standard 20 SEU clip and has the standard power settings 1-10. Add on the extended stock and it functions just like a laser rifle, with the same power settings. As if that's not enough there is also a slot in the stock for two extra 20 SEU clips giving it a total of 60 SEU's fully loaded.



WarTech SE-9 LWS

Cost:	700Cr
Wgt:	Pistol 2kg, rifle 5kg
Damage:	1d1- per SEU
Ammo:	20 SEU clip as pistol, 3x 20 SEU clips as rifle
SEU:	1-10 as pistol, 1-20 as rifle
Rate:	2
Defense:	Albedo
Pistol Range:	5/20/50/100/200
Rifle Range:	10/50/100/200/400



SE-9 LWS with stock attachment.

VARIABLE SWORD

By Chris Harper

Authors Note:

From: Ringworld 1970, Author Larry Niven
"I have a variable-sword," said Speaker-to-Animals. "I urge calm." The kzin stood against a curved wall. In one clawed fist he held something like an oversized jump rope handle. Ten feet from the handle, held expertly at the level of the kzin's eyes, was a small, glowing red ball. The wire which joined ball to handle was too thin to be visible, but Louis didn't doubt it was there. Protected and made rigid by a Slaver stasis field, the wire would cut through most materials including the back of Louis's crash couch.

In Star Frontiers Digitally Remastered optional rules Bill Logan suggested the mono- katana. He cited that many sci-fi books used weapons that utilize a mono-wire. (A wire that is as thin as one molecule and very strong.) It reminded me of the variable sword from Larry Niven's Ringworld. The only sword mentioned in the book. I was instantly intrigued by this insidious weapon. I have obtained permission by Larry Niven to adapt the Variable Sword for use in Star Frontiers.

HISTORY

The most lethal melee weapon devised. Variable swords are very rare and very illegal on most worlds. No one is sure who invented them. They are constructed secretly by private weapon makers.

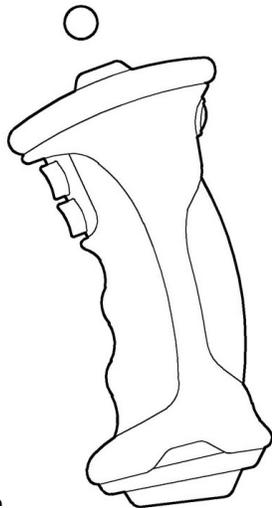
Variable swords are easy to conceal, a match for all types of armor. The blade is nearly invisible. These qualities made the swords sought after by criminals and assassins. They are also inherently dangerous to their users. Many Frontier worlds have outlawed them.

Some say they were first fabricated for use in zero- g ship yards to cut apart derelict ships. Some claim that Variable Swords were improvised weapons used during the Second Sathar War. Both theories maybe correct.

There are many designs off the basic principle. The swords are made by many different designers in secret shops, and then sold on the black market.

OPERATION

Variable swords use a mono-wire kept rigid by an inertia screen. The molecule thin mono-wire is capable of cutting through most any material with the slightest tug, leaving a clean polished surface. The weightless blade can be extended to an unusually long range for a melee weapon.



The Variable sword is basically a cylinder held in one hand. A standard 20 SEU power clip is inserted into the bottom of the cylinder. There are two buttons. One is to rapidly extend the mono-wire and inertia screen. One is to retract it. At the end of the wire is a glowing red ball. This gives the wielder a point of reference and also gives the inertia screen resistance to extend and retract the wire.

When extended, the mono-wire is nearly invisible. Its location is only betrayed by the infrequent shimmer of the inertia screen. The screen is only slightly larger than the wire so it is also difficult to discern. The wire can quickly be extended up to 30 meters. Much like the sonic sword the blade is nearly weightless and can be swung as fast as the wielder can muster. Due to the low resistance when cutting Variable swords can be used to sweep through multiple targets.

The disadvantage of the Variable Swords is that it can only be used to cut, not to stab or slash. (Useless if trapped in a room.) The most troubling characteristic of the variable sword is the potential for the inertia screen to collapse, leaving the bare mono-wire to snake around and threaten anyone within its reach.

GAME PLAY

Players receive a +15 to hit like the sonic sword. The sword does 6d10 damage to a single opponent or 6d10 plus 1d10 for each target within a 10 meter wide area. (Similar to a burst from an automatic rifle.)

All opponents being attacked by the variable sword, up to its 30 meter range that attempt to use a rifle take a -30% per SF melee rules.

Each hit uses 2SEU of the 20 SEU clip. If the SEU clip is depleted while the sword is in use, the inertia screen will collapse. Any beings within range and within 360 degrees have a 20% chance of taking 2d10 damage as the mono-wire recoils.

OPTIONAL DAMAGE RULE

If a single target takes 30 points of damage in one turn a random limb has been severed.

d10	Location
1-2	Chest
3	Abdomen
4	Right arm
5	Right hand
6	Left arm
7	Left hand
8	Right leg
9	Left leg
0	Head

* A roll of 1-3 typically spells a gruesome end to the target.

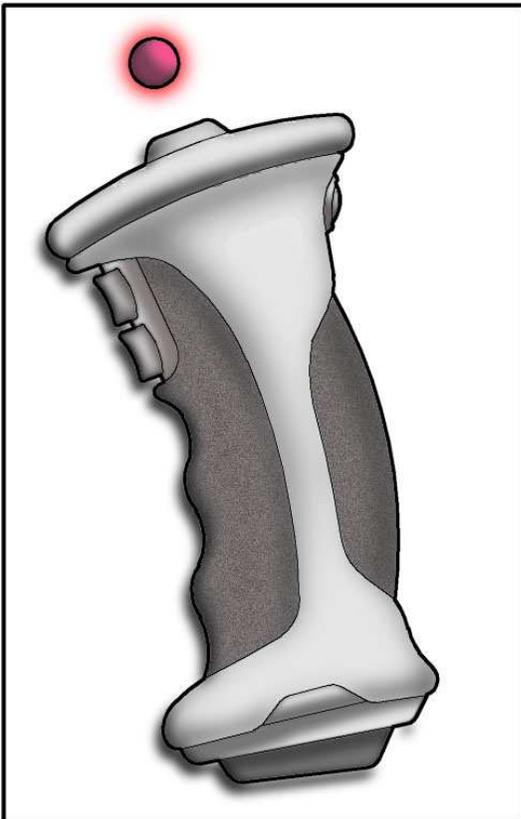
Optional Ablative damage rules (#8-p45)
Marking all location boxes in a single turn will result in the location becoming severed. Excess damage continues to a randomly rolled hit location.

For example: Gorb the dralasite strikes Zeek's left arm. Gorb rolls 6d10 damage. He rolls 5 out of six above the number 5; therefore, Zeek takes 5 hits to his left arm. Oops he only has 4 boxes left, His arm is severed. There is one hit left, Gorb rolls 1d10 for a random hit location. He rolls a 2, so Zeek takes the remaining hit to his chest.

Variable Sword

Type	Powered melee weapon
Cost	800 Cr (varies illegal on most worlds)
Overall length	14 cm handle, 0-30 meter blade
Weight	0.4 kg
Damage	6d10, 6d10 +1d10 per target in 10 meter wide area attack
Structural Damage	30
Ammo	20 SEU power clip
Defense	Inertia
Range	2-30 meters
Skill	Melee

Larry Niven is the author of Ringworld, the co-author of The Mote in God's Eye and Lucifer's Hammer, the editor of the Man-Kzin War series, and has written or co-authored over 50 books. He is a five-time winner of the Hugo Award, along with a Nebula and numerous others. <http://www.larryniven.org/>



Artwork by Chris Harper

PDG ROBOTICS

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 with artificial intelligence concepts. It is becoming well known throughout the frontier as the best of the upper echelon robot manufacturers. Here are two of their products.

PDG ENGINEERING CONTROL MODEL EC-5

Base Cost	14,547Cr
Level	5
Body Type	Anthropomorphic (humanoid)
Limbs	Two arms, two hands
Movement Type	Standard tracked
Special Programs	Computer Link, Security Lock
Equipment	Spare Type 1 Parabattery (for powering tools) Chrono-com Toxy-rad gauge Rocket Pack (KH) Anchor (100m of cable)
IM/RS	+8/80
Stamina	100
Damage	by weapon or 2d10 punching

Description:

This is a large humanoid robot that is used in the engineering section of starships of all sizes. With its high level of function and computer link, it acts as an extension of the ship's own damage control and maintenance systems. It often directs teams of lower level robots in the tasks of repairing and maintaining the ship. It is capable of inspecting any system, readout, or part and determining the standard course of action required as well as prioritizing based of severity of the damage and importance of the damaged part. The EC-5 is found on board nearly all UPF capital ships and often acts as fighter crew chiefs on carriers, space stations, and spaceship construction centers. It was the competence of this robot that built PDG's reputation.



Artwork from SFAD6, Dark Side of the Moon

PDG ENGINEERING CONTROL MODEL EC-5(S)

Base Cost	29,907Cr
Level	6
Body Type	Anthropomorphic (humanoid)
Limbs	Bound four arms and four hands *
Movement Type	Standard tracked
Special Programs	Computer Link, Security Lock, Attack/Defense
Equipment	Spare Type 1 Parabattery (screens, jammer, and weapons) Skein Armor ** Chrono-com Radiophone Anti-Shock Implant Holo-screen with camouflage feedback loop IR Goggles (FLIR) IR Jammer Toxy-rad gauge Albedo Screen Rocket Pack w/ 10 bursts Anchor (100m cable)
IM/RS	+8/80
Stamina	100
Damage	by weapon or 2d10 punching

* The arms look like two normal arms. The robot can split each arm/hand giving it four thinly framed arms and hands.

** Skein Armor is a special coating painted on the robot. It will absorb 1/2 damage from inertia based attacks up to 100 points at which time the paint is chipped away to provide protection.

Description:

This looks and operates like a standard level 5 starship engineering control robot that is typically used to direct lower level damage control and maintenance robots. Even initial scans of its programming will lead one to believe it is only level 5. It will mimic Level 5 capabilities at all times until a certain command is given it, or a certain set of predetermined circumstances require it to activate its advanced functions.



Boarding Action by Scarecrow donated to the Traveller Calendar at <http://www.traveller3d.com/calendar/>

The EC-5(s) has a hidden hardware imbedded flash ROM that houses its level 6 'robot brain' functions. The advanced functions allow the robot to take control of a ship's computer via the computer link (it must have the proper command codes, of course), and defend itself. Once activated, it will immediately log in to the computer and change all security codes to a randomly determined code and write the code to a internal removable flash drive. It will continue to modify the security codes every ten minutes until directed to stop by its recognized handler(s). It will try to maintain intermittent communications via the chronocom or radiophone with its handler(s) to receive instructions. For all practical purposes, the EC-5(s) can routinely operate the following computer programs via the computer link:

- » Computer Security
- » Installation Security
- » Ship's Drive
- » Robot Management
- » Communication, Life Support
- » Transportation (elevators)

To defend itself and the ship in level 6 mode it can split each arm/hand giving it four thinly framed arms and hands which can be used to yield weapons and work consoles. It is typically armed with various small melee weapons and tangler grenades. As a further defensive measure, it has a built in holo-screen that it can use to hide nearly anywhere while it continues to control the ship via its computer link. Its first choice for combat tactics is ambush.

It has the capability to land small ships (HS3 or less) on planets (provided the ship is designed to do so) or park a ship in orbit around the nearest planet like object. When parking in orbit, its controller is usually planet side, so it will try to maintain a geosynchronous position at an altitude less then 1000km.

Very few of these are ever built, and they are not advertised. Most are sold to rich businessmen for use on their yachts to prevent hijackings or theft.

POWER ARMOR

By Brian Cliff

Author's note: Back in the mid eighties when my sister, brother, a couple of our friends and I would get together and play Star Frontiers, this is one of the items we came up with. I used the polyplate armor as given in the back of the Digitally Remastered version of Alpha Dawn and applied an exoskeleton to it. There are also a number of optional items that can be added to the suit at time of purchase or at a later date. The suit is custom fit to a specific person.

Power armor is a full suit of polyplate armor combined with an exoskeleton. Full Polyplate Armor is a hardened polymer carapace designed to protect a combatant from harm. The suit comes standard with a 100 SEU power backpack built into the armor and a utility belt. The helmet is full faced and the visor is HUD ready (There is a power usage display for the 100 SEU power backpack displayed in the upper left corner of the visor). The helmet comes standard with a Chronocom (time being displayed in the lower left corner of the visor).

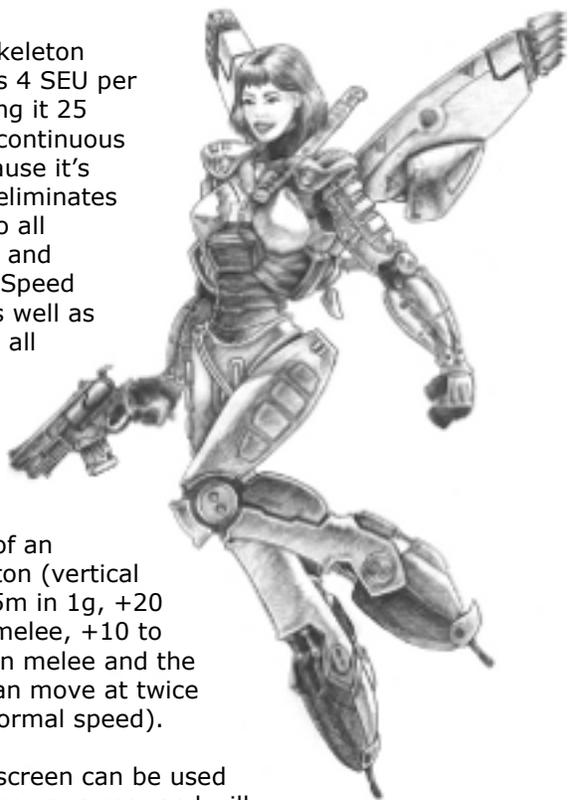
The exoskeleton consumes 4 SEU per hour giving it 25 hours of continuous use. Because it's power it eliminates the -10 to all Dexterity and Reaction Speed checks as well as providing all the

standard benefits of an exoskeleton (vertical jump of 5m in 1g, +20 to hit in melee, +10 to damage in melee and the wearer can move at twice his/her normal speed).

A power screen can be used with the power armor and will attach to the utility belt along with a 50 SEU power backpack. Defensive suits can not be used in conjunction with the power armor.

Protection Characters protected by this armor take only one fourth (round down) the damage that should otherwise be applied to them, if that damage comes from a beam weapon or physical/inertial source. The other three fourths apply to the armor.

Ablative The armor can take 250 points of damage before it stops protecting the wearer.



Defense	Cost (Cr)	Wgt (kg)	Energy	DEX/RS
Partial Polyplate	1,250	8	100 pts	-5
Full Polyplate	3,000	15	250 pts	-10
Power Armor	5,600	25	250	--

Partial Polyplate armor absorbs 1/2 damage from beam and physical attacks.

Full Polyplate armor absorbs 3/4 damage from beam and physical attacks.

Power armor absorbs 1/2 damage from beam and physical attacks.

Optional Equipment (all optional equipment will add to the cost and mass of the power armor). All costs include installation.

Item	Cost (Cr)	Mass (kg)	Notes
Retractable Sungoggles	2	--	--
Compass	11	--	HUD in lower right corner
Flashlight	6	--	Mounted to Helmet, shoulder or forearm
Gas mask	33	--	--
IR goggles	330	--	Fits over visor (removable)*
IR Jammer	550	1	--
Magnigoggles	220	--	Fits over visor (removable)*
Poly-Vox	1,650	1	Helmet mount only
Radiophone	550	4	Helmet mount only
Toxi-Rad Gauge	25	--	HUD in upper right corner
HUD targeting system	2,500	--	See below

* These items can be removed by the user and placed in a protective carrying case which is attached to the utility belt.

All optional equipment can be added at a later date. HUD Targeting System – The HUD Targeting System is a small device that is attached to the barrel of any ranged weapon and provides a HUD cross-hair on the helmet visor when activated. It provides the user with a +10 to hit with that specific weapon. All HUD Targeting Systems are calibrated to that one specific weapon and helmet, they are not interchangeable without being recalibrated (a cost that is almost as much as the targeting system itself), A HUD Targeting System must be purchased for each weapon it is to be used with.

* Artwork by Scarecrow

FRONTIER FICTION

INTERVIEW WITH AN OLD SPACER

By pariah (Jess Carver)

Author's Note: Many of you might remember the Yachts and Privateers in the Dragon articles at www.starfrontiers.com but many may not, so see those for the space of the Rollo's Revenge. If you are not familiar with these articles, they are treasure trove of adventure ideas, corrections for the rules and modules, and Knight Hawks scenarios. I hope you enjoy this article which was inspired by those articles.

As most of my regular readers will know by now, I am on a quest to prove that an old contention of mine is true. That contention is that there is at least one establishment in every system known as The Spacer's Rest.

I was on the Ken-zah Kit, and I know I say this about every one of them, but, it was one of the most decrepit, rundown and fun holes I'd found yet. In the slums, near the Starport, sure enough there was the Spacer's Rest.

I had been hearing of a legendary privateer named the "Rollo's Revenge" for the last three planets. It seemed this legendary paragon of pirate busting was capable of simultaneously engaging three Sathar Heavy Cruisers, Breaking the record on the Dramune Run and making the perfect cup of Caff in the galley while letting you drink it without spilling a drop under full thrust and maneuvering. I had been searching for this paragon of non-government built pirate busting for the last 1000 hours, so I had introduced myself to the barkeeper, a large fellow that might even give Britmoll on Triad second thoughts about starting a brawl with this one, and he suggested that I might get a good story from an old wreck in the back at the corner booth.

Most non-spacers think that these dives are dangerous and a woman like myself is likely to be accosted at the least in a place like this one. Well, they are right about that, if they walk in looking like a walking Credit Chit and soft as Air Shrike down. I however look as tough as plasitsteel toothpicks with my camera bot looking more like a combat model, and a Rafflur on my hip. Also lots of spacers (Never call them Knight Hawks to their faces, you might not live to wonder what you did wrong) know me by reputation and usually sort out the rougher types for me.

I approached his table with a full unopened bottle of New Pale Bourbon. Known by the Bartender to be my

quarry's favorite. (Also never offer anyone something already poured, they will suspect drugs or poison.) After hundreds if not thousands of false leads, I was face to face with a grizzled, white haired Knight Hawk named Donnal Starkiller. His one good, bloodshot eye was distracting to say the least. His thick white beard was split along this left jawline where there was a long scar upon which no hair grew.

"Well, you want ta know 'bout th' 'Venge do ya?" he asked in a rumbling gravelly voice after formalities were over. I nodded in trepidation, unable to sto[p my eyes from traveling back to his rheumy, opaque bad eye.

"Well, missy, ta tell ya 'bout th' Venge, ya gotta know the story of the Pride first. Catch? See, the Pride (Rollo's Pride for those readers who do not know) was well named. He closed his bad eye and thought for several seconds.

He sais, "See there ain't always been a 'Venge', Rollo captained a rebuilt Destroyer he salvaged hisself! Rollo had more pride in his ship than wuz good fer her or her crew. Well, see there's lots a spacers whut believes that the ship's name has as much ta do with how she ends up as anythin' ifn not more. Well, some figgers that ta put pride in a ship's name, means she's gonna finish up on th' rough side, but they wudnt tell'n Rollo thet! No siree! Crystal? Shiny!"

As you might be able to guess, he was very hard to follow. I mostly just nodded, and kept pouring.

"See it wuz like this. Rollo wuz a pirate buster even back then. We'd move around a lot cuz'n most systems, , after we got rid o' them pirates, the governments don't take much o' a shine ta our kind hangin' around. Catch? Good. We had been hired by the Theseus Gov't ta rid them o' a bad batch o' Pirates. They wuz a way oput past the Jovians and "Taxin" everythin' whut come inta er out o' the system. They couldn't stop 'em an' the UPF wuz as usefull as paps on a bull Roller. HEE Haw!" He degenerated into a two or three minute fit of coughing here and I was beginning to worry about his life, his face had turned crimson then magenta, when suddenly he stopped, drained the half liter glass in front of him and waved it for more bourbon. I hailed the barkeep and bought the third bottle that day, but not the last one!

See, them pirates wuz as thick as a nest o' Rasties on a Loper corpse in a Voltturnian cave! They wuz! They had frigates an' Corvettes and lots o' ordinance in them asteroids they were holdin' up in. Laser cannon, rocket batteries, ever'thin ya can imagine! And here we wuz,

one Destroyer, all by ourselves, mostly. We had one Fed Frigate with us, cuz the UPF was spread as thin as one patch spread over two holes in a spacesuit.

Well, Rollo figgred out how ta even thing up a might afore they knowed whut wuz a happenin'. See, Rollo knowed of a system that weren't mapped. Nobody else knowed of it. We came in behind their radar and we came around the star there, in a long swing around orbit, we cut the drives 5 AU's away and coasted in From above the ecliptic! Cut the drives, everythin' ceptin' the life support. No signatures, Crystal? Golden! Them pirates never looked fer that, I'll tell ya! Coasted in at Damn near .2C it was! We wuz 20K clicks away before they saw us a commin. We blasted through and caught the pirates a nappin we did! Catch? Shiny! Again he had a coughing fit brought on by cackling laughter. Again he drained a ½ liter glass of Bourbon and wanted more.

"So, we caught 'em a nappin'. They had t Frigates tied up ta th' asteroids and we blasted them where they set. Crippled 'em afore they could do anything back "But, we still had 2 Corvettes and all the guns ta deal with. The asteroids all around cut loose on us and we only survived cuz the Feds caught th worst of it. Blew in two seconds. Most o' the rockets they fired at us went up in that blast, or we'd a' been goners too. We cut in the drives. And went to full throttle and evasive. Rollo sure knew how ta deal with them pirates, he did. Them Corvettes was already patrolin', and as we came around fer a second pass, they cut across our path and caught us from astern. Lost 2 guns and some o' th' best gunners I ever served with then. Better'n even in th' UPF Navy!

We lost our drives too! One of 'em was so skragged we had ta eject her before she blew and took us with her! Rollo shut down th' other ta maintenance levels. We had ta hustle into Damage control drills, or we might a' been fragged then an' ther. But Rollo had a surprise up his sleeve he did. He had a gadget that wuz almost an ion engine itself. He could generate one window with it, then its fuel wuz gone. Catch? Shiny!

"So them Corvettes lost us and we shut down everythin' again! They couldn't even track us on energy sensors. Needed to ta fix the drive anyway.

The two Corvettes came at us from opposite directions and had fifying solutions already calculated. Well, most folks would think that meant they had us, but nosiree, that Rollo sure knowed how ta deal with pirates, I done to! ya that! He turned right towards the one ta starboard and full throttled right at it! Them uglies had us right where Rollo wanted 'em! Ya see, Rollo'd been there before and he knew just exactly whut ta do. By turnin, into them, he messed up their aiming computers. They had counted on us a bein' sommer's else'n whur we wuz, Catch? Golden. Ya see Rollo waited until exactly the right second, and let me tell you, everybody on th' bridge thought that second had come and long gone. At the right second, Rollo flipped us 90 degrees ta starboard and fired up the drive. We squirted out o' the way like a greased Slither. Then

when they both fired, them stupid Flitters, they took each other out, two great big fire balls a travelin' at about 70K clicks and a blowed ta EM CEE squared!

But, them Frigates weren't as out of the fight as we had figured, one of em had launched and wuz now on us. So here we wuz, blacked out, one gun left an two Frigates a trackin' us. We musta' been leaking some kinda energy cuz one o' them buzzards turned right for us. Well, some'll tell ya this is a space story, But I seed it muhself that day! Anybody, oughta know that nobody can hit something a movin thousands o clicks a second out at 30K cklcks without any radar or computers or anythin' but I seed it muhself! Rollo unstrapped hissself from his command chair and flung hissself down the length o' the Pride and made Ratchett Bill, our laser battery gunner git out o' his mount and in Roll climbed!. He used th' hand crank and fiddled with th' aimers. Set real still for 'bout two ta three minutes, then all a' sudden he stabbed that firing stud. Everybody was so tense by then that when the flash o' light lit up the cabin, we all jumped an' hollered like we'd a' been goosed with a Cybodragon tentacle! But sure enough, 3 seconds later, Whammo! That Frigate blew ta Sathar space! Again he collapsed into one of his laughing, coughing fits and I was ready this time I handed him my own untouched glass which he promptly drained.

When he had recovered, he said, "Well little lady, we spent so much time and effort a watchin' that FF, the other'un a sneaked up on us an' bugged us good, we just had got the drives back on line when Blewey! We was holed through the midships! Av RB (Rocket Battery) had scored on us. We lost a good many o our good friends that time let me tell ya."

He was silent for several seconds, violent emotions playing on his face. I thought this grizzled ols spacer might cry in front of me. Out of respect, I pretended to be interested in a Dralasite pummeling a Yazarian over a lost bet at the bar until he recovered his composure and dignity. He nodded silent thanks, more acknowledgement than I had expected!

"So, here we wuz, no drives, one gun, and a live Frigate, even ifn it was damaged and one o' them cobbled together pirate rigs anyway, up our bums!. Rollo'd already figured out what ta do tho! Yessiree! We wuz a flying out of the system at atleast 50K clics a second and the FF wuz a chasing us. Well, the Pride still had some surprises in her. Rollo had removed the front half of a torpedo, welded her on ta the bow, nozzle a facin' fore. A lot o crew always wondered what that was for. He triggered that rigged up retro rocket and cut our speed by half at least. That second AS whizzed past, firing AR's where she thought we'd be, but weren't now!" He laughed again, but curiously didn't cough.

"As she sailed past not 500 yards off, Rollo let her have it twice with his laser battery. She went off like the Auroras on Morgaines! Started ta tumble an' pitch, dead in space they wuz!

"Now the base hadn't been silent all this time, no way! They had been a shootin' everything they had on em, but when they seen the last of 'em go, every Pirate in them asteroids lit out in anything that'd move, work pods, life boats, shuttles, what ever they could get and they lit out, let me tell you what.

"The pride wuz finished, the ejected drive had blowed, and the other was so fried that if'n we'd a fired her up ta full, she'd a' gone off too! But ol' Rollo, he don't never know how ta quit. He rigged the work pods to the ship's launch, got some volunteers in suits, strapped them ta the outside and chased down the parts of ever thin' we'd blasted. Every one o them ships wuz holed and scortched, but we found enough parts 'n pieces ta piece something together. Ol' Rollo got one whizbanger o' an idea then.

"Have you ever seen the 'Venge, little lady? No? Here" He pulled out a holo of the strangest looking starship I've ever seen. "Nice," I said.

"You ain't kidding little lady. The nicest homebrewed pirate buster in the Frontier!

"Well, we had whut wuz left O the Pride, the Fed Frigate, one o' the Pirate Frigates, almost all o' one o' the Corvettes, and the empty station to work with! Did you know one of them Corvettes wuz one of them first Assault Scouts? One of them with the decks built in the wrong directions, with all of the crew's seats like fighter pilot's seats? Had a great big bubble on top, looks like a huge fighter it did, well, that's the front end of the 'Venge right there. He indicated the forward section of the craft in the holo, and indeed, it made sense that this was originally a separate ship.

He took our one good drive left, fixed up now, of course, and mounted her in the tail of the least banged up pirate Frigate! That's where they kept their own any way. He then took parts of the other Frigate's hull and made engine struts and nacelles, mounted the Corvettes' drives on them, and hollowed out the Corvette, where he'd took out her drives, with a little cutting an' welding, the two ships became one! He mounted her at the front of the Frigate and put his con up in that bubble, just like a fighter. He mounted a Laser Cannon from one of the Asteroids and a Torpedo launcher from the Frigate in the Corvette! We mounted the Pride's last LB and two electron Beam Batteries and an Electron Beam Battery we'd took from some of them rocks that had been firing at us on the hull too!

"Well, that's how the "Venge came inta being. She's the toughest, best armed class 10 outside the Fleet, and better'n some there too!

We talked some more, and discussed some of the finer points of the engagement, he was impress at how much I understood of such matters, and were nearly ready to part company. But I made a fatal mistake at the end. I asked him if having the word Revenge in the name of a ship was not as bad, if not worse than, having Pride in a ship's name.

"Teats on a Sea Shrike, woman! No ya stupid Ground Hog!" He stormed off, but did not neglect to collect what was left of the Inner Reach Rum as he left with a noticeable lurch in his step. Apparently, logging nearly 100,000 hours in space liners didn't confer the title of spacer on me as far as he was concerned.

Wishing you, my readers ten light years of fortune
-- Darleene McCoy (No Relation!)

MEMORY

By Tom Verreault/jedion357

Nausea swirled in Groon's head like a dust vortex till he was compelled to wretch but nothing would come. A cold and sandpaper like hand pushed him back into a reclining position as the gray vortex of confusion began to pull him under.

Distantly he heard a hissing voice say, "Sssssoon he will have no memory of the event."

Later Warrant Officer Groon sat patiently through a Doctor's discharge exam knowing the medical service would move at its own speed.

"Hey Doc, what happened to me? My last mission is pretty foggy in my mind and I have these dreams about someone saying I wouldn't remember anything?"

The doctor stiffened then lied, "You've sustained massive head trauma which may have resulted in memory loss. Wait till your debrief and I'm sure your questions will be answered."

Groon knew he was lying. Any dralasite worth his fluids could plainly read that and Groon had honed his ability to detect lies as a Sergeant long before going to Officer Candidate School. Besides the biological nature of a dralasite made head trauma causing memory loss about as likely as Groon spacewalking without a pressure suit.

Trying another tack, "How the rest of my crew? Lieutenants Tabbe and Klast?"

The doctor shook his head and said, "I'm sorry son, I cannot answer your questions you'll be conducted to a debrief shortly....I'm officially discharging you as fit to leave the hospital but recommending some time off from full duties."

Groon sat with Ensign Bryson in a hot tub. They were getting steadily drunk and toasting dead companions. Groon was imbibing a mild intoxicant in the form of a weak human style beer as well as absorbing stronger stuff directly from the water. The beauty of being a dralasite was the ability to absorb alcohol from any portion of his skin. So at this point he was considerably further along than Bryson who was knocking back whisky and as a human he was immune to the hot tub's intoxicants. That was the point though to get numb enough to sleep through the shock of loosing the rest of their ships crew.

"So you can't remember anything either?" ask the ensign.

"No nothing before closing with the freighter and Lt Tabbe ordering us to exchange our lasers for stunners."

"He did?"

"I think so but it seems foggy- something about order form higher command... but they didn't go into it during debrief."

"Speaking of which, wasn't that the shortest debrief you ever had? I mean a Royal Marine ship is stormed by Sath..."

Groon changed his foot appendage into a hand to grab the ensign's leg and pull him under water. The young human came up sputtering and glowered at Groon, "Hey!"

"You stow that shit Marine! Getting drunk is no excuse for violating orders."

"Yeah but Chief we're being lied too and you of all people should know that."

"You think I don't? I'm still a Royal Marine."

"But Klast and Tabbe and the others are dead and we don't know what happened...just a statement of, 'died in the line of duty?' And that shit about head trauma? I thought dralasites kept their brains in the center of their body? So how does head trauma affect your memory?"

Groon wanted to shake his head at the naïve ensign but instead said, "It doesn't and we are going to find out what happened or I'm not a Chief engineer!"

"How? Their putting Osprey through and unscheduled refit and you can bet the computer logs will be wiped. They won't even let us aboard with this sick leave crap. Since when don't they make a ship's crew work their butts off assisting with a refit?"

Groon sighed, "Bryson I have know doubt you'll make a fine commanding officer one day but damn if you aint a bit dense. For whatever reason the fix is in and we're not suppose to know what happened."

"And you're fine with that?"

"Heck no, but I'm no fool either, which is why I spent a little time down in robotics today."

"Huh?"

"If they aint putting us to work on a refit then who's helping with the work?"

"Oh..."

"That's also the reason we're sitting here getting very drunk in public," he said motioning to the rest of the

bar. "I had to program the robot with Klast's security code so that it could download the ships logs and that will create a record of the download and we'll be suspected."

"Klast's code, how did you get it?"

"She was always a bit of an air head so she wrote it inside the cover of here personal tool kit."

Bryson had sat stone face with a black eye through the memorial service. The black eye Groon had given him after they had viewed the logs together. Bryson had wanted to storm the heights of command with his new knowledge and get them both before a court martial and another brain wiped, however that had been accomplished.

The logs had revealed that Lt. Tabbe had been a traitor and had shot Klast in the head on the bridge as the airlock had opened to the freighter. They had been caught flat footed at the air lock as the alien sathar had swarmed aboard the Osprey. It had been a desperate fight from which only Bryson and Groon had emerged alive. Once the sathar undocked from the Osprey they had fled the system with all speed. When Tabbe had shot Bryson from behind it was Groon with his naturally high reaction speed and martial arts training who overwhelmed and kill Tabbe. It had been touch and go for Bryson till another ship could get there.

Now they knew the truth. Lt. Maxwell Tabbe had been a sathar agent, a traitor and he was receiving a hero's burial with full military honors. That was what the Royal Marines wanted covered up. It was too much of a scandal to admit that the premier militia of the Frontier could have a decorated officer turn coat to the sathar. It was why they had even gone to the extent of a memory wipe. Neither Bryson nor Groon were native born citizens of the system and they could ill afford the truth leaking out if either of them resigned and moved away. Groon understood the reasoning behind that but shook his head at the thought; Bryson and Groon despite their difference in age had taken service in the Royal Marines to earn citizenship and the benefits of living in such a prosperous system.

He even suspected that he knew how the memory wipe was done. There had long been rumors surrounding the eorna of Volturnus and their advanced medical and physch technology. Groon had not believed the stories concerning mind wiping by the eorna but once he pulled the recording of the eorna ambassador's voice he knew that was the voice from his weird dream that had prophesied his memory loss. Some discrete chit chat and buying of drinks for hospital staff had confirmed that the eorna ambassador had come to the hospital under military escort.

So now they knew the truth and it burned like acid. Maybe he should finish this tour and resign, taking a billet with a freight line to get out of Clarrion altogether. One thing was certain to Groon though, being a Royal Marine had lost its shine.

ADVERSARIES

By Richard "Shadow Shack"
Rose

Magnate General Yan-Soon Shea-Dow is a militant dictator leading the Sovereign Domain Authority (a.k.a. the Soon Uprising) against the UPF. Little is known about Shea-Dow save for the following: Yan-Soon began his military career in the Truane's Star government, starting off as an enlisted soldier and eventually graduating from officer training school and receiving a small command. Popular theory has it that Shea-Dow was approached by or even joined the Free Frontiersmen Foundation before going AWOL.

He spent at least fifteen years away from the Frontier and all UPF worlds carrying out his master plan, building up a virtual war machine founded upon his knowledge of military operations, financial resources, and his hidden base of operations. It is widely believed that he has a private base or even an entire planetary operation in an uncharted system from which to operate and strike out against the Frontier. It is also believed that at least one large corporation is assisting in the finances of this operation, possibly Streel as another popular rumor dictates that he is somehow related to Streel's CEO Hilo Hadow (who denies any association or relation to Yan-Soon).

Also noteworthy, his title of General is self-appointed as he never made it past Lieutenant in the TS government. Titles aside, this upstart dictator is not one to be taken lightly as he is capable of strategies in league with the wisest of generals. He has gone public with declarations of intent concerning the take over of a UPF system and having it secede from the Federation. Such actions would place said world with access to companies wishing to participate in immoral or illegal ventures and research outside UPF jurisdiction and beyond the reach of interstellar law, up to and including the possibility of pirates and other criminal organizations. Since a local system's government does not fall under the charter of the UPF, they can not get involved despite the threat of secession. UPF charter allows for such acts, although it would be economically, historically, and politically foolish. But Yan-Soon is a clever fellow, very charismatic and well funded. Yan-Soon's most recent attempt occurred in the outpost world of Histran in the Scree Fron system, which would have succeeded if not for a group of crafty civilian freight haulers in conjunction with the local militia of neighboring Hakosoar that thwarted his take-over.

Considering his vast resources though, it is highly unlikely that such an event will be so easily prevented next time around as there have been reported sightings of SDA owned capital ships and multitudes of fighter squadrons, so the next outbreak could no doubt become a military campaign targeting Spacefleet at the very least.

This almost happened in the White Light system. SDA operatives established themselves in the former Planoran Pirates asteroid base as a temporary holding area. After a small build up of military warships assembling, the Clarion Royal Marines prepared for war. Fortunately, it never came...the SDA craft departed both silently and mysteriously, much in the same manner as they initially appeared. UPF tacticians deduce the maneuver was a feint, drawing attention away from a possible main focal point. A similar feint appears at nearby Timeon as well, this time being in the form of a worldwide blockade that lasts three weeks before the ships suddenly disperse to points unknown, before UPF warships can arrive and investigate.

PLOT HOOK

That main focal point is Laco, the outpost world located near the hub of the Frontier. Easier to ransack than Histran, as it has no neighboring world to come to its aid. Scores of warships arrive in-system encircling the outpost planet and effectively cutting it off immediately. Only a small squadron of star fighters is able to mount a defensive opposition, and they are quickly vanquished. SDA immediately establishes a military blockade, effectively cutting off

Truane's Star and Zebulon (along with the Rim) from the rest of the Frontier. Numerous assault carriers, frigates, destroyers, and cruisers orbit the desert world and patrol its lanes, backed by unfathomable numbers of fighter craft as well as armed civilian grade vessels (mostly freight haulers and scout ships). Alas, there is a back door...Streel has managed to discover traversable routes and they are quick to set up "paid escort services" through Dixon's Star, capitalizing on this crisis. The fee is stiff, but guaranteed. As such, it is applicable to any craft seeking safe passage, up to and including SpaceFleet vessels. Craft that don't pay enter at their own risk. The rumor of Streel being in cahoots with SDA grows. SDA eventually declares war against the UPF, and a ten year series of military build-ups occur in key systems. One by one, systems fall to the Soon Uprising, who appears in each system with warships equal to and often exceeding UPF craft. It is a dark hour for the Frontier, as a militant group spreads their iron grip across civilized space with swift and calculated efficiency. Even the Sathar, taking advantage of what they perceived as a weakened state, fall to the SDA's might. It almost seems as if the SDA war machine is limitless in size and numbers.

Can the few remaining bands of UPF Loyalists hold out much longer?

MAGNATE GENERAL YAN-SOON SHEA-DOW (FY: 70)

Race:	Yazirian (male)
Handedness:	R
Movement:	10.30.4
Height:	2.2m
Weight:	65kg
Hair:	Brown
Eyes:	Black
Birth Planet:	Pale (Truane's Star)
Birth Date:	2-2-20
STR/STA	55/75
DEX/RS	60/60
INT/LOG	60/70
PER/LDR	50/70
IM	7
Racial Abilities:	Gliding, Night Vision, Battle Rage 75%

PSA: Technical	Level
Technician	4
Computer	5
Robotics	6
Beam Weapons	5
Melee Weapons	6
PsychoSocial	5
Medic	3
Bionics	3
KH Engineer	5

Equipment

Skeinsuit (civilian)
Raflur M-0 Proton Sword, Electric Quarterstaff
Laser Pistol
4x 20SEU Powerclips
Chronocom, ID

Lord Q'ortir-Mein

Yan-Soon's right hand man is the cybernetically enhanced vruskan Lord Q'ortir-Mein. Formerly known as Lieutenant Colonel Q'ortarmas, he was involved in a star fighter crash and was seriously (not to mention permanently) injured during the SDA's operations at Histran. He was later revived with bionics and cybernetic implants, replacing extensively damaged and destroyed tissues and organs. Despite losing half of his abdomen (and four legs as well), his skeleton was surgically laced with a federanium alloy. Mechanical lungs and an electronic respirator assist his organic heart, digestive tract (which can only tolerate liquid food), and brain; the latter of which was enhanced with a micro-computer. Other useful items include passive IR/UV receptors, a radiophone, toxy/rad guage connected to gas filters in his helmet, an infrared jammer, built in compass, electromagnetic boots for zero-grav maneuvers, and cyber-linked shoulder mounts for heavy weapons. His revived self was reborn under the guise of Lord Q'ortir-Mein and he has served as Yan-Soon's primary leading agent ever since.

Colonel Destra

Vivian Destra was recruited directly from under Yan-Soon's former command with Truane's Star. She is the top ranking officer, second only to Lord Q'ortir-Mein. She is as cunning and dangerous as she is demure and attractive...her primary service is the coordination of ground troops. Her thirst for bloodletting is unparalleled, and she has been known to abandon her post more than once to join her troops for little more than the sheer joy of the slaughter.

Lt.Col. Victor Menaas

Another loyal casualty of war, Victor's injuries were nothing compared to Q'ortarmas' sufferings. Victor suffered from an artillery explosion that burned half of his body. His armor constantly feeds a soothing liquid medication gel onto his burns to ease the infectious wounds, although he feels nothing thanks to seared nerve endings from the blast. A cunning and ruthless warrior, he reports to Destra and is usually found relaying her orders on the ground.

Major Quell-Sum

A higher ranking female Yazirian from the Vilia clan, one of Yan-Soon's two clan heritages. She has risen through the ranks with a vast knowledge of firearms. Her specialty is vehicle combat and artillery, but she prefers going hand to hand with a foe.

Lt. Dah-Lina

This half-liter Ifshnit transplant from the Rim joined SDA with the promise of military command. As a Lieutenant she recieved that command aboard one of the Soon Uprising dreadnaught class vessels as a Battery Commander, coordinating groups of rocket batteries against the enemies of SDA. She finds this line of work much more exciting than her former merchant life in Capella. In an attempt to blend in with Frontier lifestyles, she regularly shaves her ifshnit bodyhair, something that would be seriously frowned upon back home. But she has no intent of returning, unless General Yan-Soon opts to go after any Rim worlds...

Lt. Afismyte

This female vrusk is the chief medical and environmental officer in the SDA. Her research in the field of bionics and cybernetics led to an exile from Frontiersociety. Piracy and other criminal organizations were not very appealing, but she liked what SDA had to offer and was a shoe-in. It was by her hand that the rebirth of Lord Q'ortir-Mein was made possible.

Chief Master Sergeant Mosilaj

The highest ranking of the enlisted troops is the Dralasite Mosilaj, whose vast knowledge in the fields of weapons, maneuvers, and computers makes him a valued member among all officers. He often leads troops under the command of Menaas, both on the ground and in spaceships. Unlike most dralasites, he has no sense of humor whatsoever. As such, when he isn't serving in times of warfare he works as a drill instructor with new recruits.

TIME LINE

44 f.y. Lt. Yan-Soon Shea-Dow receives honorable discharge from Truane's Star military after serving with Col. Louis V. Jameson on his retirement mission. Jameson joins the Truane's Star Exploration Force soon afterwards.

45 f.y. PC's start here, basic scenarios (Port Loren Raiders, Hepplewhite Inc crash, etc). Yan-Soon Shea-Dow arrested during a Free Frontiersmen Foundation operation and is imprisoned for five years.

46-47 f.y. 1st Zebulon mission lost, second begins

49 f.y. Starmist discovery (SF:3), Yan-Soon Shea-Dow gets paroled and is reported missing soon after release.

50 f.y. Rhianna system is discovered by the Cassidine Development Corporation, but is kept secret. Alcazar adventure (SF:4)

50-60 f.y. Laco's War. PGC and Streeel wage the first Corporate War on Laco. The UPF eventually steps in and empowers an inter-mega-corporate commission to resolve the differences. Other mega-corps study Laco's War as a possible legal precedent for solving disputes.

51 f.y. Sathar invasions begin, small forces and fleets appear in the Frontier at an alarming rate. PC's enroll into Gollwin or the newly established SFC, or other methods to acquire ship skills.

53 f.y. Mercenary Starbase enacted, joint venture between PGC and Star Law for a roaming fleet and military force

54f.y. SF/KH:0 Clarion Marines adventure

54 f.y. The Mechanons on Voltturnus revolt. Only through quick action on the part of Star Law is a full-scale war avoided.

55 f.y. Mercenary Starbase construction begins, freighter captains obtain charters and begin hauling goods en masse to Zebulon for the next seven years. It is a very profitable period for freight haulers.

56 f.y. Second Sathar War begins as large fleets arrive in force

57 f.y. University of Zebulon opens in Anker

59 f.y. A Streeel-designed freighter registered to a Yan-Soon Shea-Dow is seized by Star Law. The computer's memory was wiped during boarding actions and the crew maintains no knowledge of the ship's owner.

60 f.y. Sathar War winds down, corporate war ends at Laco with both sides calling a truce and retreating from the outpost world.

61 f.y. The Third Dramune War is fought (SF/KH:1 module).

62 f.y. Cythar begin to infiltrate the Frontier

63 f.y. Mercenary Starbase completed, Sathar "Juggernaut" encountered by Strike Force NOVA and SFC forces

64 f.y. Operation Dreadnaught bill is passed near the year's end as an answer to the Juggernaut fiasco

65 f.y. Dreadnaught construction centers commence while new battleships begin construction. Streeel loses contracts for a new battleship design but earns a healthy contract for a heavy cruiser design that becomes something of a mainstay in Spacefleet. Other shipyards begin submitting variants of other warship designs, including new frigates, destroyers, and light cruisers

66 f.y. General Yan-Soon Shea-Dow, leading the Sovereign Domain Authority, overtakes the outpost world of Histran in Scree Fron, announcing his intent to secede from the UPF. His forces are thwarted shortly afterwards by a group of independent ship operators allied with surviving militia and SFC forces

67 f.y. Trade established with the Rim planets.

68 f.y. Sovereign Domain Authority makes a second appearance near Timeon, blockading the planet for 35 days

69 f.y. Dreadnaught construction centers completed in Prenglar and Cassidine

69 f.y. SDA makes a second attempt at a world takeover in White Light, foiled by the Clarion Royal Marines before operations can begin.

70 f.y. The Mechanon civilization on Voltturnus undergoes an upheaval. The majority of peaceful Mechanons migrate into the undeveloped space between Screen Fron and Dixon's Star.

70 f.y. White Light maneuver by SDA was a feint, SDA rushes in to overtake Laco in short order. Various SFC squadrons are defeated by the sheer numbers of SDA fighter craft present. Only Streeel manages to find a way through the gauntlet to allow access from Zebulon and Truane's Star to the rest of the Frontier, and is quick to exploit it. The SDA military presence in Dixon's Star is scaled to that of Spacefleet. Emmisaries from Laco during the next scheduled Council of Worlds secede from the Federation, announcing sovereignty in that system.

71 f.y. The Waller Nexus system is discovered by the UPF survey ship Eleanor Moraes. The only habitable planet, Mahg Mar, is the site of the first UPF mutiny. Liberty system discovered by the UPF same year. The planet Snowball is liberated from Sathar tyranny. Tacticians, politicians, and exobiologists are given a chance to study Sathar machinery and methods first

hand because of the information gathered by the populace during their occupation. It is feared that many pockets of Sathar tyranny exist all around the Frontier and Rim.

72 f.y. First UPF dreadnaughts are commissioned, only to meet dreadnaughts under the helm of SDA as Yan-Soon begins to expand his grip on the Frontier. The SDA war machine appears in full force, sweeping through the Frontier leaving a trail of devastation to any opposition.

73 f.y. Mechan is discovered by migrating Mechanons. Its entry into the UPF is blocked until the legal status of the Mechanons can be established.

74 f.y. Tough new guidelines for legal ownership of a system or planet are laid down by the UPF and the Council of Worlds. The guidelines are designed to halt mega-corp expansion and to prevent occurrences such as the Mechanon problem and the SDA takeover in Dixon's Star.

75 f.y. UPF declares war against the Sovereign Domain Authority, recognizing them as a threat to Frontier peace.

76-78 f.y. SDA overtakes the four Yazirian systems (Araks, Athor, Gruna Garu, & Scree Fron)

79-80 f.y. UPF loses ground in the vrusk systems (K'aken-Kar, Kizk-Kar, & K'tsa Kar), loses Madderly's Star towards the end of f.y.80

81 f.y. Prenglar falls to Sovereign Domain Authority forces. Cassidine surrenders shortly afterwards. General Yan-Soon announces peace or devastation via superior firepower to all remaining systems. He promises that uninterrupted free trade will flourish under his control with zero threats from pirates, sathar, or any other element.

82 f.y. With ten systems under SDA control, including the two capital/task force locales, the UPF falls apart and the Council of Worlds is dissolved. Strike Force NOVA and Mercenary Starbase vessels continue to fight the good fight, albeit resorting to hit and run guerilla tactics.

83 f.y. Sathar forces invade the Frontier, but are quickly dissolved by SDA forces. Remaining systems (along with Strike Force NOVA and Mercenary Starbase) surrender to or pledge loyalty to SDA. The Star Fighter Corps is absorbed by SDA. Clarion is the last to fall, recent heiress Queen Leotia Valentine XXI finally opts for peace over a system wide blockade and a war that would effectively devastate her world. Star Law falls under control of SDA shortly afterwards, and becomes a gestapo-like presence under SDA rebadging.

84 f.y. Pirate forces begin to invade the SDA controlled Frontier, but like the Sathar are dispatched quite efficiently. Yan Soon makes good on his word against pirates and the Frontier trade routes.

85 f.y. Third Sathar War opens as SDA establishes a firm governing foothold in the Frontier. Former Spacefleet, Star Law, and Merc Starbase vessels, allied with the SDA war machine, provide plenty of resistance to the worm threat.

86 f.y. SDA controlled Landfleet forces capture a live Sathar, first specimen to be studied

87 f.y. final Sathar invasions, SDA begins to expand and explore the outer reaches of Frontier borders in order to discover Sathar homeworlds

88 f.y. Rim Coalition, fearing hostile takeover from arriving SDA vessels, pledge loyalty to Yan-Soon

89 f.y. SDA vessels encounter first Sathar world but are destroyed

90 f.y. SDA fleet dispatched to Sathar outpost world. Sathar plea for a peace treaty in order to protect their homeworlds from discovery. Dozens of cythar, Sathar, and Zuraqqor vessels arrive and drive SDA back

90 f.y. Third Sathar war ends in a stalemate, SDA does not commit to further exploitation of Sathar worlds and the Sathar back down, realizing that their secrets stand to exposure should the war continue

90 f.y. MalCo Enterprises resurfaces at Volturnus. SDA does not see them as a threat as they are not aggressive towards the new governing power, but they are closely watched nonetheless

91 f.y. Surviving UPF loyalists form an elite cadre. Unable to convince SDA of a swift invasion of Sathar worlds, they continue to grow in numbers. Many former Strike Force Nova and Mercenary Starbase vessels disappear into the void

92 f.y. Tempers rise between mega-corps, especially once Streeel has been revealed to be a primary financial backer for SDA by the Free Frontiersmen Foundation (who in turn are also revealed to be a major backer of the UPF era SDA)

93 f.y. The University of Zebulon receives Frontier-wide support via SDA. Its facilities on Anker increase over the next 20 years until they are larger than most Frontier cities.

94 f.y. MalCo successfully bribes local governors in Zebulon, unbeknownst to Yan-Soon and the rest of SDA. Fearing retribution, Yan-Soon orders Star Law to decimate all known cults and cadres. UPF Loyalists, whose primary operations can't be located, are declared an enemy of Frontier peace.

95 f.y. Galactic Task Force and MercCo fight the first post-SWII Corporate War over settlement rights on a moon orbiting Alcazzar in the Rhianna system. Hostilities quickly spread to include all seven of Alcazzar's moons and over a half dozen mega-corps. The Corporate Wars begin in earnest.

96 f.y. MalCo vessels with questionable manifests and destinations are detected by Star Law in the Rim systems. While their cargos are not illegal, the inconsistencies raise questions...such as why resource loads are being transported to resource producing worlds and such.

97 f.y. SDA garrison established in Zebulon, centering on possible illegal activities on Volturnus

98 f.y. The Rim and the SDA enter into multiple defense treaties and economic trade agreements, but the newly established Rim Confederation gives severe warnings to all mega-corps that their militancy will not be tolerated in the Rim. Tourism & trade between the SDA and Rim is established and is immediately successful. The Frontier now officially includes the Rim Worlds.

99 f.y. Star Law is invited to the Rim to help the Coalition train their own planetary branches.

99 f.y. The first Star Law graduating class containing Ifshnits, Humma, and Osakar finish their training. The violent outbursts threatened by a few radical cults never appear.

100 f.y. The Rim's Age of Adventure begins as hundreds of exploratory vessels are sent out to map the unknown regions surrounding the Rim.

101 f.y. MalCo, with external financial backing via Pan Galactic, resumes legal business ventures after PGC attorneys clear their name

102-106 f.y. The Rim side of the Lesser Morass is mapped.

103 f.y. The first Rim Star Law agents appear. The structure is identical to the SDA Star Law organization, swift and fearful gestapo police.

104-111 f.y. The Rim side of the Xagygy Dust Nebula is mapped.

105 f.y. Star Law is given equal powers, rights, and jurisdiction in both the Rim and SDA systems for interplanetary and interstellar crimes. While it works mainly with the local law enforcement agencies, Star Law is recognized as the only law enforcement force with full and complete authority throughout the entire Frontier.

105 f.y. An altered Mechanon assassinates the Governor of Zebulon. The SDA suspects that the Sathar may be establishing an extensive spy and terrorist network. The possible Sathar use of mechanical life forms, such as the Mechanonss, as agents becomes a prime investigative goal of Star Law.

106 f.y. The Mechanons are officially informed by the SDA that they are not considered a stable enough society, at this time, to be allowed equal status in the Frontier. They are forthwith considered "wards of Sovereign Domain Authority." Their protection and

supervision are the responsibility of SDA governors. While most Mechanons accept this as a necessary step toward independence, some rebel and go underground, swearing to avenge their race. Many of these are suspected of being Sathar agents.

106-111 f.y. Mapping of the Rim side of the Xagygy Nebula is completed up to the Klæok system.

107 f.y. The A.I.P.S. is formed. Except for the Capellan Free Merchants, who were introduced into the SDA society under unusual circumstances, it is the first mega-corp voluntarily created by smaller companies in an effort to resist merger or take-over attempts by existing mega-corps.

108 f.y. In an effort to stem the growing numbers of Corporate Wars, the SDA and Rim Confederation worlds grant Star Law the authority to recruit and use mercenaries and to establish the Star Law Psi-Corps, a special branch of Mentalist-disciplined officers.

109 f.y. Mega-corp recruitment doubles in non-enforcer professions. A trend of smaller and cheaper skirmishes or espionage missions to replace the larger, more expensive Corporate Wars begins to show. Over the next two years the term "Corporate War" comes to mean a war of intelligence gathering, tactical enforcement procedures, and industrial sabotage rather than full-scale military operations.

109 f.y. Long-range probe ships are sent into suspected Sathar space away from the Rim and SDA systems on the other side of the Xagygy Dust Nebula. It is hoped these probes can answer the question of where the Sathar come from.

110 f.y. A human assassin fails in his attempt to shoot Queanee Kloonanu, a Rim Confederation Governor under the SDA. A small bioform is found attached to the human's back. Scientific studies show it to be some kind of intelligent, parasitic organism with the same genetic make-up as Sathar specimens. Authorities believe it to be a new Sathar method of controlling agents. See-through apparel becomes fashionable almost immediately.

110 f.y. Garrisons in Zebulon are removed, enacted and approved by local governors (see 94 f.y.)

111 f.y. Mapping of the Xagygy Dust Nebula continues from Klæok and K'aken-Kar.

111 f.y. The Grand Celebration, commemorating 30 years of the SDA treaty is planned for the entire year. Gala social functions, parades, and celebrations are planned on every planet under SDA control and even some in the Rim. However, former UPF loyalists have risen in strength and numbers. The first publicized rebellion against the SDA is carried out by Princess Leotia Valentine XXII as she smuggles valuable SDA data obtained by the Clarion Liberation Party and manages to make it all the way to Zebulon before being discovered. She is captured, but her Zebulon contact is never found. SDA speculates that this contact may hail from a Rim system.

YACHTS AND PRIVATEERS RETURN

By Douglas Niles

Editor's Note: When I received pariah's submission I got inspired to remaster the Dragon/Ares/Imagine/Polyhedron articles. If you would like to help, please send email to submissions@starfrontiersman.com. Special thanks to jacobsar for his work in formatting the articles in a webzine friendly format.

* Artwork by GJD

REVISED STATISTICS FOR STAR FRONTIERS KNIGHT HAWKS SHIPS

Imagine yourself flashing like a meteor through the void of space with a Federation cruiser on your tail, or picking your way nimbly through the densely-packed asteroids in the White Light system, searching for a pirate base concealed somewhere among the crowded rocks. These are just a couple of situations in which you might appreciate having the controls to a fast maneuverable ship at your fingertips.

The yachts and privateers introduced to the STAR FRONTIERS Knight Hawks game in DRAGON® Magazine #86 ("Fast and Deadly") represent new vessels designed for jobs such as these. Because of some discrepancies with the game rules contained in that article, some additional explanations are in order.

As several readers noticed, the armament allowed on the yachts and privateers more closely resembles that allowed on military vessels than civilian ones. In fact, these ships were designed as "paramilitary" vessels, and consequently are not restricted by the civilian ships' limitations on armament.

Because of the advanced technology needed to outfit these ships, however, the cost of building the also increased. To simulate this, if players in your campaign wish to purchase or build a yacht or privateer ship, require them to pay double the hull cost listed in the Knight Hawks rules.

The ship statistics given below should be considered official for the various classes of both yachts and privateers.

The following abbreviations are used;

HS Hull Size
HP Hull Points
ADF Acceleration/Deceleration Factor
MR Maneuver Rating
DCR Damage Control Rating

YACHTS

These six classes of yachts are listed below. The specific ship statistics are for the first vessel of each class; these vessels have consequently given their names to the entire class of ships.

Note that the first models of the Yacht class were armed like military ships. Later models have been streamlined considerably for less warlike roles. To simulate this modification, players are allowed to add 1 **ADF** or **MR** point for each weapons or defense system that is removed. This is an *exception* to the Knight Hawks "Modifying Spaceships" rule. (Remastered pg 50)

Rim-Song	DCR: 29
HS: 3	ADF: 4
HP: 15	MR: 3
Weapons: Laser Battery	
Defenses: Reflective Hull	
Note: 0 Lifeboats	

Imp Class	DCR: 32
HS: 4	ADF: 3
HP: 20	MR: 4
Weapons: Laser Battery; Assault Rocket Battery	
Defenses: Reflective Hull	
Notes: 0 Lifeboats	

Nova Class	DCR: 35
HS: 5	ADF: 2
HP: 25	MR: 2
Weapons: Laser Cannon; Laser Battery; Rocket Battery	
Defenses: Reflective Hull	
Notes: 0 Lifeboats	

Rollo's Revenge Privateer – heavily armed and ready for combat.



Astro-Blaster III Class	DCR: 38
HS: 6	ADF: 1
HP: 30	MR: 3
Weapons: Laser Battery; Electron Beam Battery	
Defenses: Reflective Hull; Interceptor Missiles (x4)	
Notes: 0 Lifeboats	

Moonbright Stinger Class	DCR: 45
HS: 9	ADF: 3
HP: 45	MR: 2
Weapons: Laser Cannon; Seeker Missile Launcher (x2)	
Defenses: Reflective Hull; Interceptor Missiles (x6)	
Notes: 1 Lifeboats	

Nebula Class	DCR: 41
HS: 7	ADF: 3
HP: 35	MR: 3
Weapons: Laser Cannon; Laser Battery; Rocket Battery	
Defenses: Reflective Hull; Masking Screen	
Notes: 1 Lifeboats	

Rollo's Revenge Class	DCR: 50
HS: 10	ADF: 3
HP: 50	MR: 3
Weapons: Laser Battery; Proton Beam Battery; Electron Beam Battery; Torpedos (x6)	
Defenses: Reflective Hull; Interceptor Missiles (x6)	
Notes: 1 Lifeboats	

Belvedere Class	DCR: 47
HS: 9	ADF: 3
HP: 45	MR: 3
Weapons: Laser Battery; Rocket Battery	
Defenses: Reflective Hull; Interceptor Missiles (x4)	
Notes: 1 Lifeboats	

PRIVATEERS

Privateers were designed as powerful, fast ships. Unlike yachts, these vessels have not evolved beyond their original purpose and are still used primarily for combat operations.

Thruster Class	DCR: 26
HS: 2	ADF: 4
HP: 10	MR: 5
Weapons: Assault Rocket Battery (x4)	
Defenses: Reflective Hull	
Notes: 0 Lifeboats	

Lightspeed Lady Class	DCR: 32
HS: 4	ADF: 4
HP: 20	MR: 4
Weapons: Assault Rocket Battery (x3)	
Defenses: Reflective Hull; Masking Screen	
Notes: 0 Lifeboats	



The Avenger, a Rollo's Revenge class privateer is escorted by two UPF ships, a modified assault scout and light-frigate.

Condor Class	DCR: 59
HS: 13	ADF: 3
HP: 65	MR: 3
Weapons: Disruptor Beam Battery; Laser Battery (x2); Proton Beam Battery; Electron Beam Battery; Torpedos (x4)	
Defenses: Reflective Hull; Interceptor Missiles (x8); Stasis Screen	
Notes: 1 Lifeboats	

YACHTS AND PRIVATEERS IN YOUR CAMPAIGN

Despite their relatively high cost, the versatility and high performance aspects of yachts and privateers are causing them to appear more and more frequently throughout the frontier. For example, the space battles fought as part of "Laco's War" have been fought almost exclusively by privateers, and both privateers and yachts promise to figure prominently in the struggles to control trade to mineral-rich Alcazzar as well (see the **Mission to Alcazzar** module for more information - Ed.)

Other uses for these nimble ships include duties as pleasure vessels, exploration ships, convoy escorts for corporate or military formations, high-speed freighters, scouts, mercenary transports, and even pirate ships.



ENCOUNTER WRITING COMPETITION

By Tom Verreault/
jedion357

Tom Verreault/jedion357 is having a writing competition for the Best Single Star Frontiers encounter. The prize is a "Volturnus Survey Mission II" hat worth \$20.00. The stone colored embroidered hat has an ark of planets and the words, "Volturnus Survey Mission II" arched over that.

COMPETITION REQUIREMENTS

1. Entries must be in Word, PDF, or Word Pad file and uploaded to **SFman Encounter Competition** project at www.starfrontiers.us. Entries will be considered once they are uploaded AND an email is sent through the websites Private Message system to jedion357 stating that the entry is ready for judging. (See below for How-To create an account)
2. The entry deadline will be announced in the project area.
3. All entries will be considered submitted to the Star Frontiersman webzine for consideration for publication and entries published in the webzine may be edited prior to publication. Credit to the original author will be given.
4. Entries should be limited to equivalent of a single section in the printed modules and should be an Alpha Dawn style encounter.
5. Encounters should include; a skill check type challenges, **ONE** combat, and or a role play encounter.
6. The encounter should have an adjustable level of difficulty and Non Player Characters (NPC's) should be presented in a simple scalable format that can be easily adjusted. (see NPC Level Table)
7. Each contestant is encouraged to create a thread in the project forum for feed back on their work-in-progress files.
8. Entries should, as much as possible, be rule generic. However, if a specific rule is particularly important to the encounter, use the following as a reference. RAD 23 or RKH 23 would be found on page 23 of the *Remastered Alpha Dawn* rules or the *Remastered Knight Hawks* rules respectively.
9. Finalist will be chosen by Jedion357 and a poll will be run two weeks after the entry deadline at www.starfrontiers.us for registered members to vote for the best encounter.

WHAT SORTS OF ENCOUNTERS IS THE ORGANIZER LOOKING FOR?

Quick encounters that can be slotted into any campaign or game as a transition or filler encounter by the referee. The setting can be anything or anywhere in the Frontier or Rim. Use of an equipment items from any issue of the Star Frontiersman will be considered a plus but should make sense for its inclusion in the encounter or be important to the encounter.

HOW TO PRESENT SCALABLE NON PLAYER CHARACTERS

There are currently a variety of rule sets that can be used to generate characters for Star Frontiers, from the official first edition Alpha Dawn & Knight Hawks rules to the half edition Zebulon's Guide to a number of excellent fan developed rule sets. With that in mind all Non Player Characters (NPCs) will be presented in a simple scalable format that will be easily adjusted to the rule set being used.

1. Begin with a name or descriptive title like Thug #3 and a race.
2. List a suggested level AD 1-6; all stats for the NPC will be based off this level but do not list the stats just the level. A NPC will have all ability stats based on this level (see below). Any referee needing to increase or decrease difficulty will be able to change the level and insert the stats from the table below.
3. Next list important skills but not weapons skills: NPCs are considered to be able to use any weapon they are equipped with. All combat and skill checks will be taken at the NPC's level listed.
4. Next list important equipment carried by the NPC. Not everything needs to be listed but just what is likely to be important to the encounter.
5. Finally give a short description of the NPC's motivations and personality.

Example: Pirate tech; dralasilite; Level 2; Computer, Technician; Equipment: Gyrojet pistol, 3 frag grenades, tool kit, power belt, albedo screen, and skien suit. He's the clown of the crew and uses his antics to lull others into a false sense of security. Will fight dirty and smart and is not above running away to fight another day.

NPC LEVEL TABLE

Level 1: All ability scores 35%, RW 28, M 28, PS +2, IM +4, Racial ability 15%

Level 2: All ability scores 40%, RW 40, M 40, PS +2, IM +4, Racial ability 20%

Level 3: All ability scores 45%, RW 58, M 58, PS +3, IM +5, Racial ability 25%

Level 4: All ability scores 50%, RW 65, M 65, PS +3, IM +5, Racial ability 30%

Level 5: All ability scores 55%, RW 78, M 78, PS +3, IM +6, Racial ability 35%

Level 6: All ability scores 60%, RW 90, M 90, PS +4, IM +6, Racial ability 40%



"Volturnus Survey Mission II"

STAR FRONTIERS WEBSITE ACCOUNT CREATION

1. If you do not have an account, create one at <http://starfrontiers.us/loginregister>
2. After your account has been created login and head on over to the **Encounter Writing Competition** at <http://starfrontiers.us/node/4078>
Then click on Request Membership
3. Within this project you can use the Download tab to upload your work-in-progress adventure. Once uploaded, there is a handy icon you can click on that will automatically create a topic to discussion.
4. When you visit the site you can click on the **What's New** tab in the main navigation to see any new content on the site. Note that you must be a member of a project to get a list of new content.



Shipwrecked long ago on Survey Expedition 93a, Captain Ta'nak'a and his crew have adapted well. The environment has offered much in the way of survival but nothing in the way of technology. His crew once kept huge fires hoping to signal a ship from space. That was until *they* attacked. Without warning a third of the crew was taken by night. The Captain has sworn to get them back - one way or another.

ENCOUNTER TILES

Editor's Note: We need more maps, creatures and adventures for the webzine. Use past issues of the Star Frontiersman to get inspired. Like an adventure seed in the fanzine? Draw a map or describe an encounter and send it off to Submissions@StarFrontiersman.com



Get your own copy of the Star Frontiersman Issue 1-6 from LULU.
<http://www.lulu.com/content/1447800>

virtual table top like Open RPG and for use with miniatures by having them enlarged and printed.

The Mountain Pass is actually designed to be a narrow mountain valley with a road or stream running through the middle. The surrounding mountain peaks suggest a classic ambush scenario but the possibilities are unlimited.

CENTRAL ENCOUNTER

By Larry Moore

MOUNTAIN PASS

By Tom Verreault/jedion357

Something I've been thinking about for a while is the generic encounter locations on the back of the Port Loren map from the box set. The encounter tiles on the back of that map are titled; Crater, Mountains, Desert, Fort, Ruins, Forest, and Town. I believe that having expanded print and electronic versions of these available to the Star Frontiers community would be a benefit to

referees.

To that end I created an approximate copy of the mountain encounter and generated three more matching tiles. Once released in the Star Frontiersman, these maps will be available as PGN files by download at <http://starfrontiers.us/node/3498>. The location is the **Architecture Project** which is ostensibly about maps of adventure locations.

The Mountain Pass encounter tiles were designed to be a match with original tile with its light blue road that looks like it could double as a stream or river. They are also designed to support use with the original die cut counters from the Alpha Dawn box set. The electronic files that will be available by download serve a dual purpose. They'll be useable on line for gaming on a

One day I got inspired to pull out my soft cover Star Frontiersman fanzine off the shelf and start reading from Issue 1. What I found was amazing – I got really excited to started crafting an encounter/adventure using just the SFMan material. I hope to publish it in Issue 15. Here's a link to the work-in-progress. <http://starfrontiers.us/node/4066>

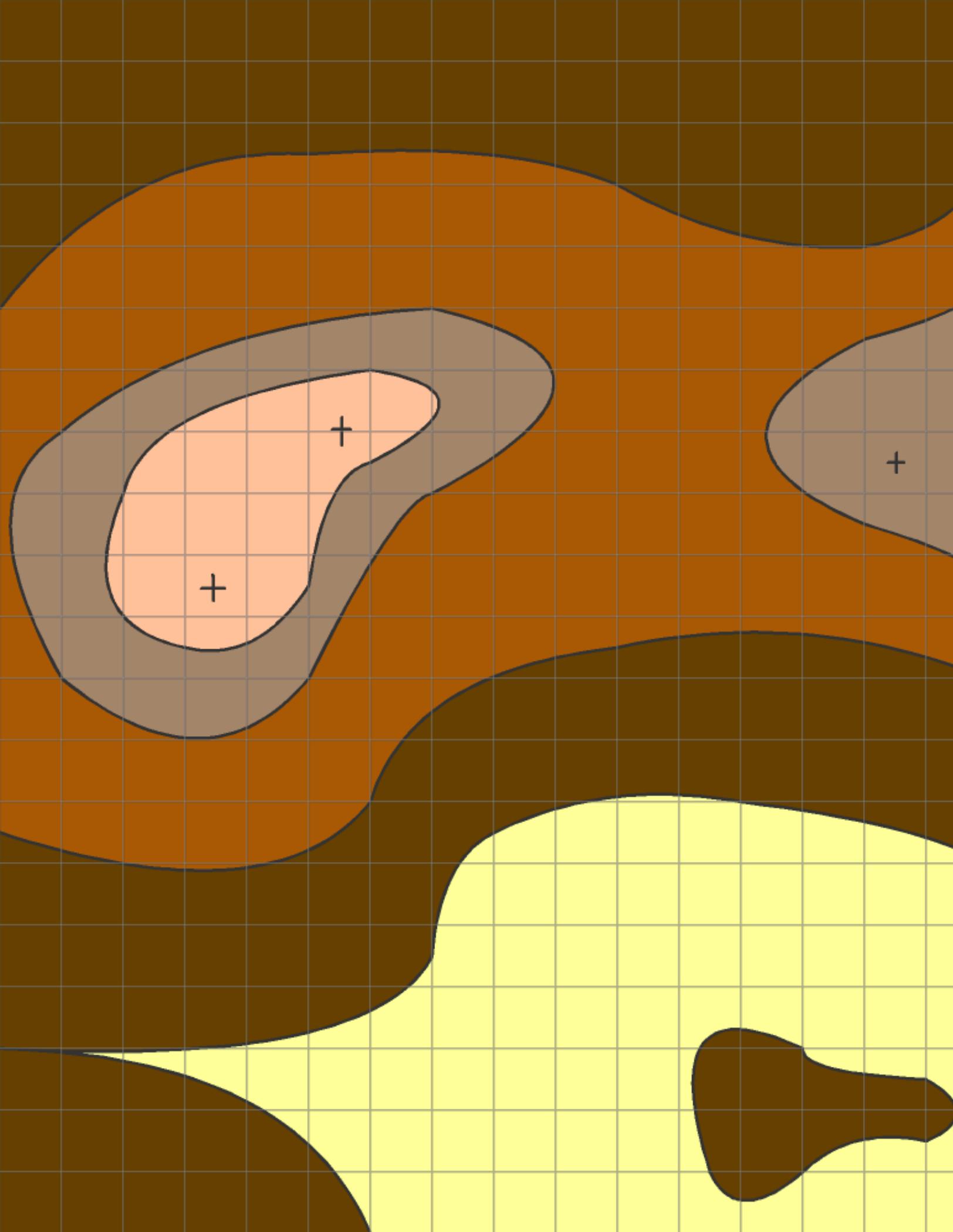
After creating the adventure I decided to start making small encounter maps. The idea was inspired by Bill Logan's map work, Tom Verreault's deck plans/tiles and Star Wars Miniatures Tile Wars.

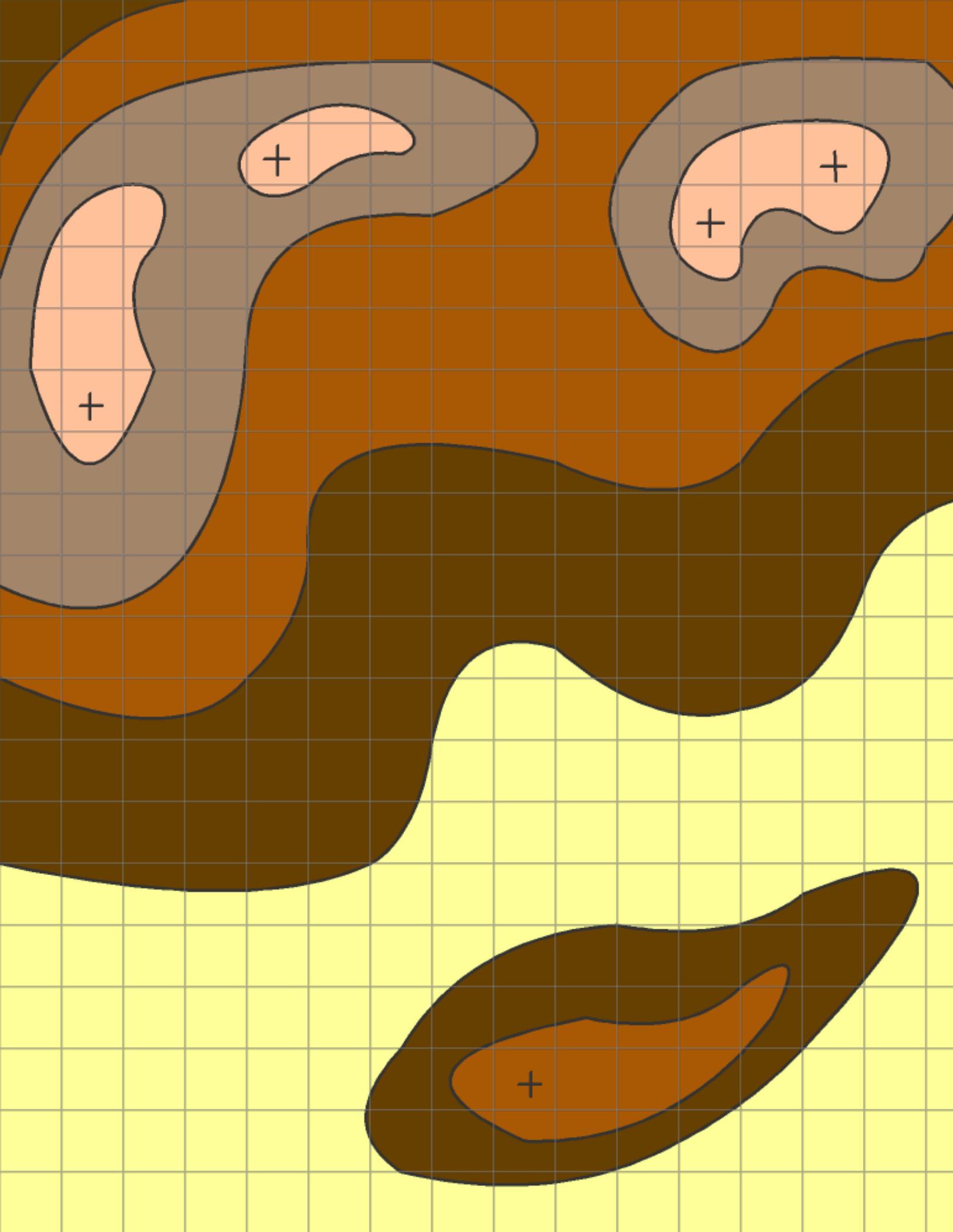
Consider detailing the map areas 1-9 and send it in for publication. We'd love to hear from you. Here are some ideas for inspiration;

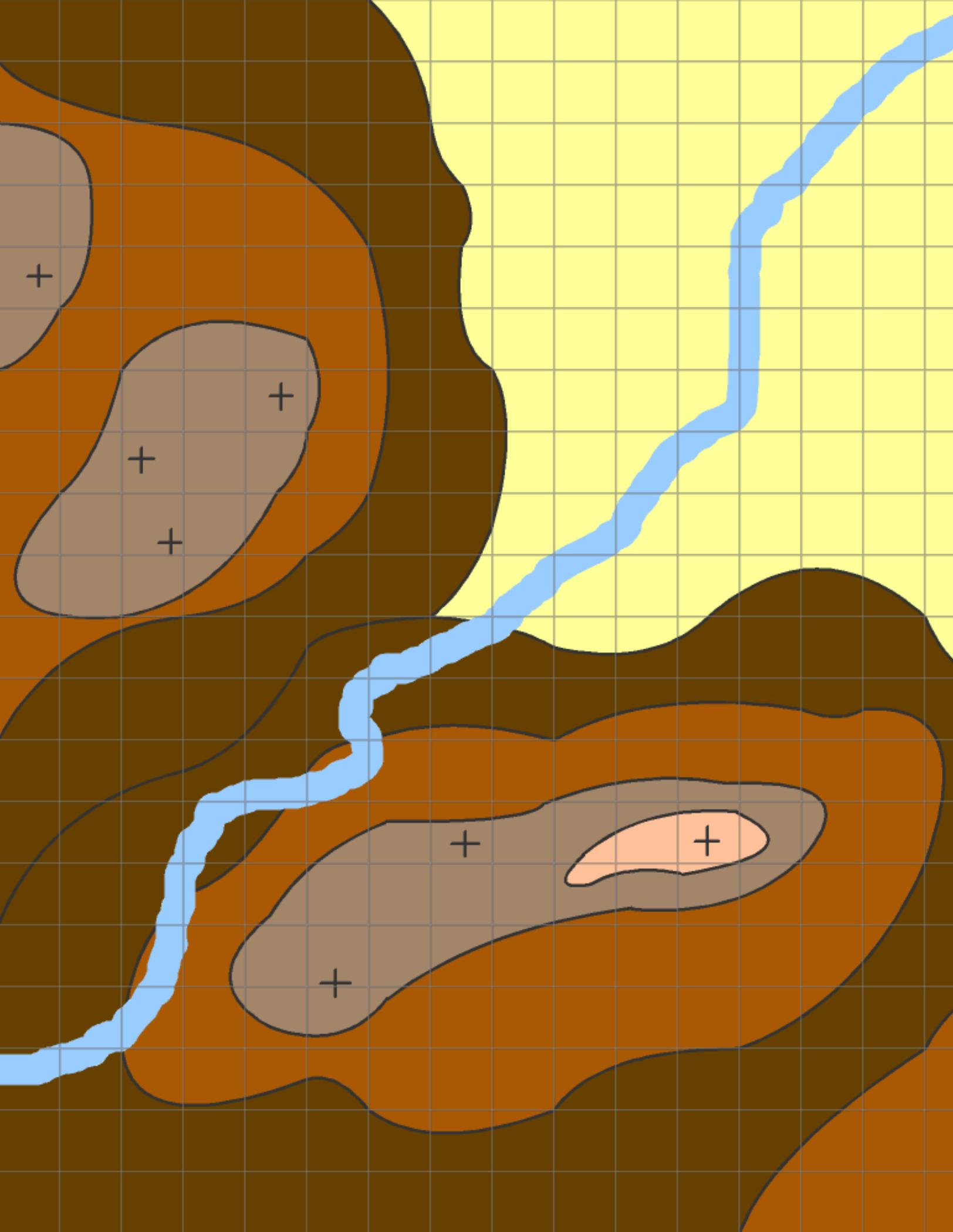
1. Hallway to central city docks.
2. Public access elevator will take anyone with a blue card pass to levels 1-3.
3. Hallway to parking garage.
4. Public computer access terminals.
5. Hallway to restricted employee offices.
6. Private terminal access for employee's.
7. Security office.
8. Secure storage.
9. Architect installed a secret door with a mechanical interlock.

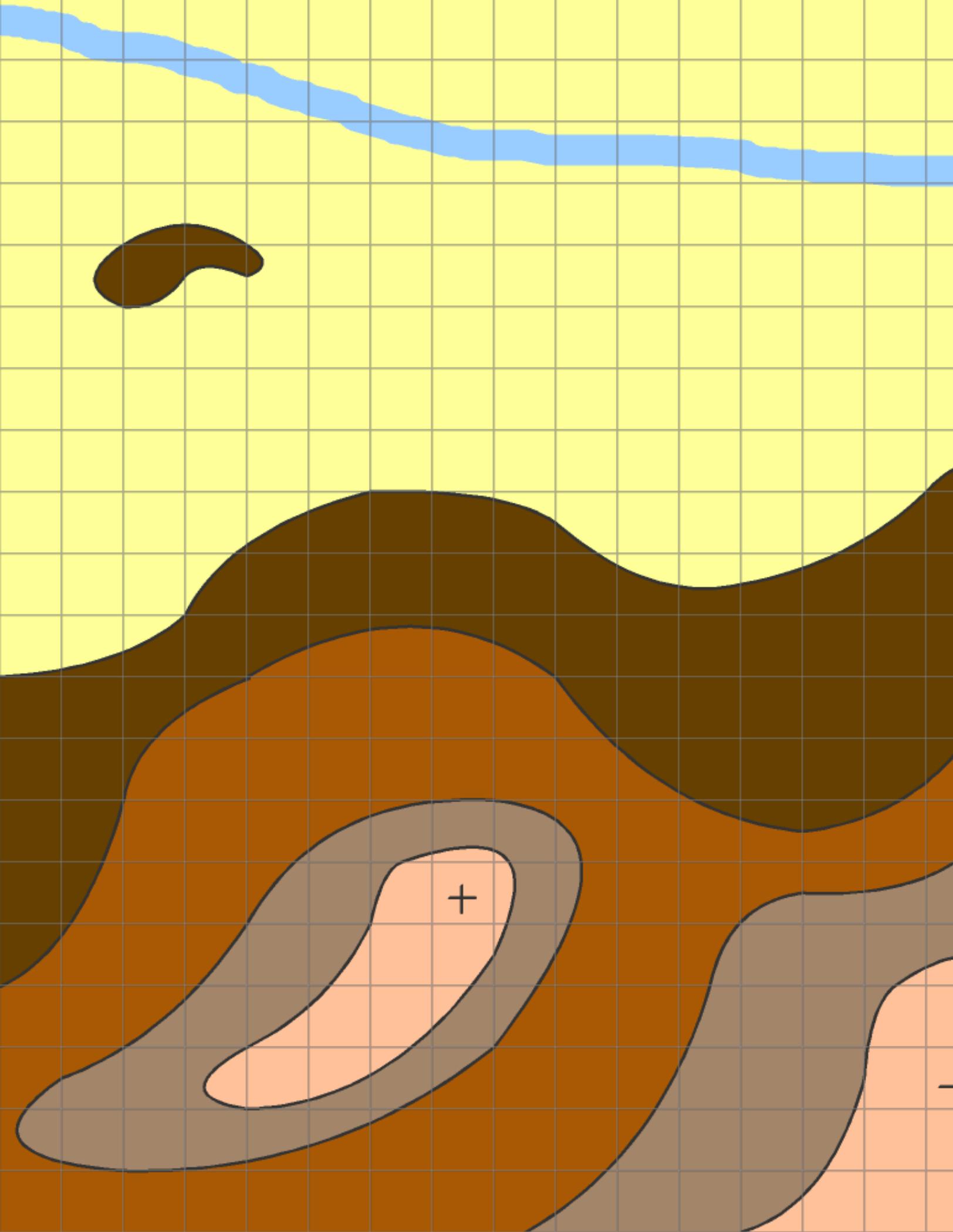


Download these maps and more at <http://starfrontiersman.com/downloads/misc>





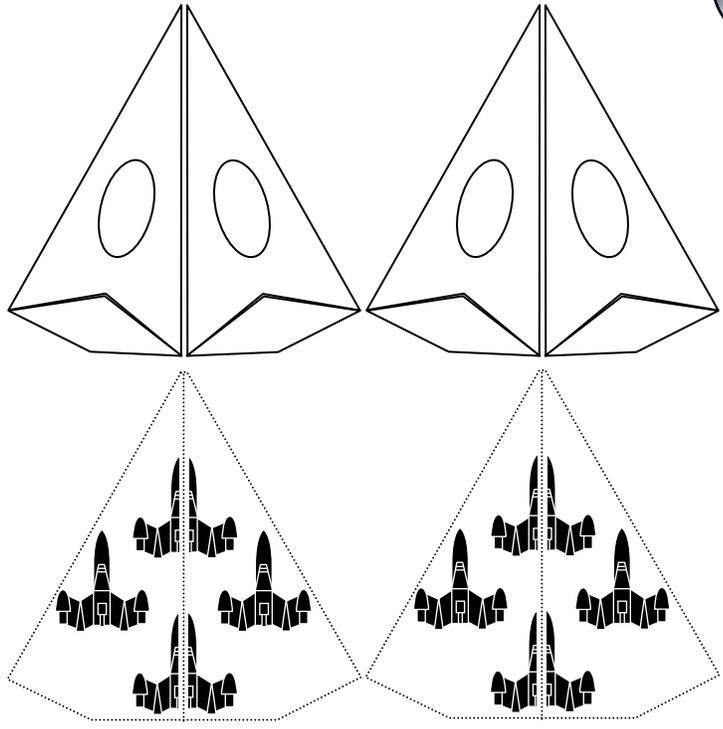
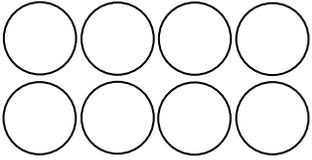
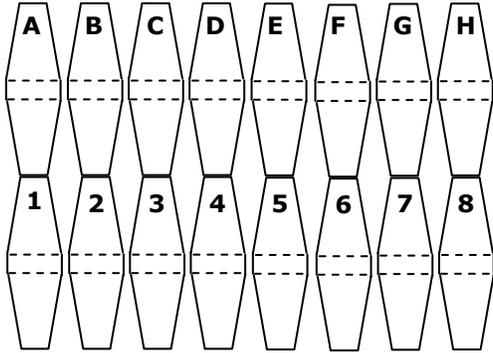
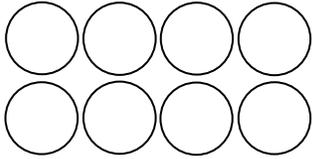




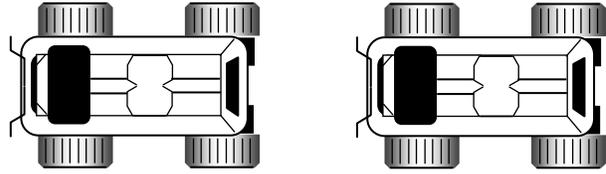
I use the following simple counters to represent robots, characters and NPC's.

HOW TO ASSEMBLE

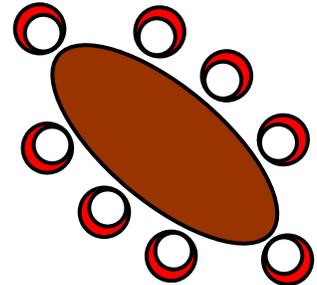
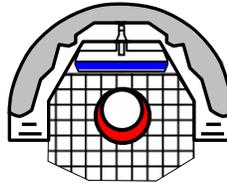
1. Print out this page.
2. Cut along the solid lines (they are small but it's not hard).
3. Fold along the dotted lines, one side at a time.
4. Glue the letter or number flap to the other flap (make sure you can see the letter/number).
5. Glue the letter/number to the circle base.



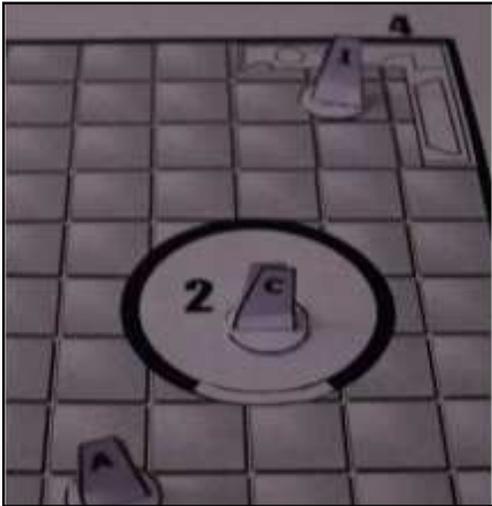
Cut around these counters border, and then fold in half for a quick and easy wing of modified assault scouts (or capital ships above)



This explorer is designed to work with **Central Encounters**.



Random counters designed to work with **Central Encounters**.



Printed, assembled and placed by w00t!

ADVENTURE LAYOUTS

By Larry
Moore

The following article provides a layout for building adventure modules. My goal is to provide a standard for adventure writing. This is useful for the Online Gaming project we are attempting to get started. Additionally if we have several Referees' running the same adventure, with a standard layout they can easily pick up where the other left off. Of course standards help write the adventure themselves. A good start to adventure writing has been provided by Brian Conway in his article titled **Creative Refereeing**, #7-p13.

NOTE: The following section entitled "COVER" is optional. I included it to make the module complete from cover to cover. With my own writing sometimes I get bogged down finding just-the-right cover image to spending too much time writing the teaser text. The most important part is the adventure itself which begins at "REFeree BRIEFING REPORT".

COVER

This is the cover page of the adventure. It contains the following information including an image picturing an scene from the adventure.

Adventure Number

I use the following conventions; SFAD-Cxx or SFKH-Cxx. Refer to the following table.

Acronym	Description
SF	Star Frontiers
AD	Alpha Dawn
KH	Knight Hawks
C	Contributed
xx	Module number

Example; SFAD-C03 would be the third contributed module using the Alpha Dawn rules.

If a module uses both AD and KH rules simple use the SFKH acronym and state in the introduction; "This module uses the Alpha Dawn Expanded Game Rules in addition to the Knight Hawks Campaign Book Expansion Rules."

Gaming system name

Once you have the adventure number simply type out the game system that will be used.

"Star Frontiers Alpha Dawn Adventure"

"Star Frontiers Knight Hawks Adventure"

Name of the adventure

The adventure name should be succinct, something catchy and relative to the story line.

Table of contents

A table of contents (TOC) will be listed along with credits to the author, editor and artists.

REFeree BRIEFING REPORT

This is the Referee's introduction to the adventure. It contains topics such as;

- How to use this module
- Number of players and skills required
- Adventure overview and plot synopsis
- Campaign Adjustment (optional)

Campaign Adjustments - If this is a continuing adventure module from an existing campaign this section covers details if the PC's have taken part in previous adventures or they are starting the campaign from this point.

ALPHA, BETA, GAMMA, DELTA, EPSILON SECTIONS

These sections start with an introduction to the players and begin the encounters they will face. Each section is designed to provide a single-nights gaming session, about 3-4 hours of playtime and has the following layout. (In the example below I will use Alpha)

1. Session Introduction

This is always section 1 of the session, for easy identification by Referee's. This section is a recap of the previous session and an introduction to the current session.

» **Alpha 1.0 Introduction**

2. Encounters

This is always section 2 of the session, for easy identification by Referees. Sessions can have many events/encounters designed to eventually lead to session's main event. Each event/encounter is numbered as a subsection of section 2. For example: Alpha 2.1, Alpha 2.2, etc. Events normally lack mapped encounter areas, but may have images, sections to read aloud, or handouts.

They are often of one of the following event

types: encounter, role-playing, problem-solving, or skill challenge.

- » **Alpha 2.0 Encounter**
- » **Alpha 2.1 Encounter**
- » **Alpha 2.2 Encounter**
(and so on)

3. Main Event

Always section 3 for easy identification. This is either a keyed map area location or simply a main encounter/event of the sessions. Each keyed map area is found as subsections of section 3. For example, a corridor on a map for Gamma session might be labeled with a "6" to be described in Gamma 3.6.

- » **Alpha 3.0 Main event**

4. Session Wrap-up

Always section 4 for easy identification. This is usually a final role-playing event or sometimes just a moment to rest the characters. Sometimes it is just a boxed section of text to read aloud. It always includes experience awards, along with any other things awarded to the character for their efforts.

- » **Alpha 4.0 Session wrap-up**

Next I use Beta since the Alpha section is complete, then Gamma, Epsilon and so on until the module is complete. Example;

- » **Beta 1.0 Introduction**
- » **Beta 2.0 Encounter**
- » **Beta 2.1 Encounter**
- » **Beta 2.2 Encounter**
- » **Beta 2.3 Encounter**
- » **Beta 2.4 Encounter**
- » **Beta 3.0 Main event**
- » **Beta 4.0 Session wrap-up**

REFeree'S BACKGROUND MATERIAL

This section is dedicated to the Referee and may contain one or more of the following topics;

- Abbreviations
- Season and movement
- Maps
- Player character equipment *
- NPC stats and tables
- Random encounter tables
- System brief *
- Alien creature update report *
- New rules

* Depending on the adventure these items may appear in the Player's Background Report.

PLAYER'S BACKGROUND REPORT

This section is dedicated to the Players and may contain one or more of the following topics;

- Handouts
- Briefing Reports (Background information)
- Maps (Only maps that characters would have before the adventure starts)
- Pregenerated Player Characters
- New Equipment

FUTURE ADVENTURES

This section gives ideas for plot hooks and future adventures the Player's may encounter down the road.

BACK COVER

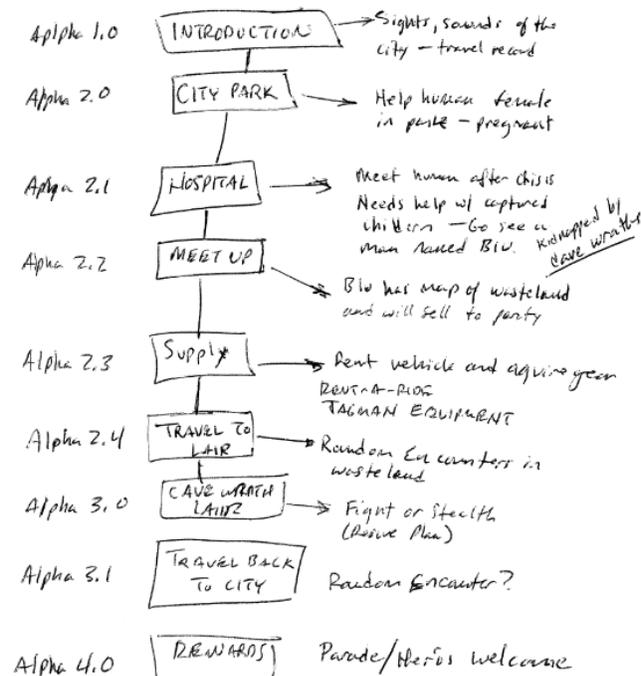
Teaser text and Image

The teaser text should appear on the last page of the book, something to draw in the reader but does not give too much detail away. It should also have a picture representing a scene in the adventure. Sometimes the back cover is a crop of the front page image zoomed in.

TIPS ON WRITING MODULES

I use a piece of graph paper or blank sheet and write a simple introduction. Under the text I draw a box and fill in the first main event (Alpha 3.0). The next box is the second main event (Beta 3.0); the following box is the third main event (Gamma 3.0) and so on. I connect the boxes with lines, off to the side I write down encounter ideas that lead to the main event. Sometimes I use a random encounter.

While the party is travelling through Enderson a human female begs them to help her rescue children from cave wraiths.



WORLD WORKS MARS STATION REVIEW

By Tom Verreault/jedion357

Author's Note: I'd like to start my review of World Works Games' Mars Station product by confessing my natural prejudice against paper models. I'm a bit of a hardcore miniatures collector and painter and I greatly prefer metal minis over plastic. Concerning terrain, I've collected a number of resin models as well as scratch built buildings and the only paper models in my collection before trying World Works were simple little tent models. I suppose I shouldn't call it a prejudice against but rather a preference for harder heavier models.

World Works website is very easy to navigate and though purchasing a download requires registering with the company that was simple as well. Once you've registered and purchase a download you'll be able to re-download your purchases at a latter date by accessing your account (kind of nice in the event your computer crashes).



First impressions of the product after opening the download were very positive. The company includes a PDF on how to use the set as well as an instruction folder of nine PDFs covering assembly of the various sections of the product. The FAQ PDF was more or less a one page ad for the company but it does clue you in to the video tutorials available on their web site. All materials were full color with illustrative photographs and concise written instructions. I very quickly developed a feeling that World Works was interested in ensuring that their customers were successful at using the product sold to them. I would rate them as very *user friendly*.

The actual product is impressive; it includes PDFs of building, canyons, props, a vehicle, low walls and

barricades as well as ground and floor mats; over 95 paper models! The ground and floor sections caught my eye as they had 1" square grid which is common to battle mat type playing surfaces for miniature based games but they also included a grid less copy of the ground maps for those who prefer a more aesthetic look. The company claims that the ground sections can be laid out as a 21" x 28" play surface however I made mine bigger by duplication some of the ground sections.

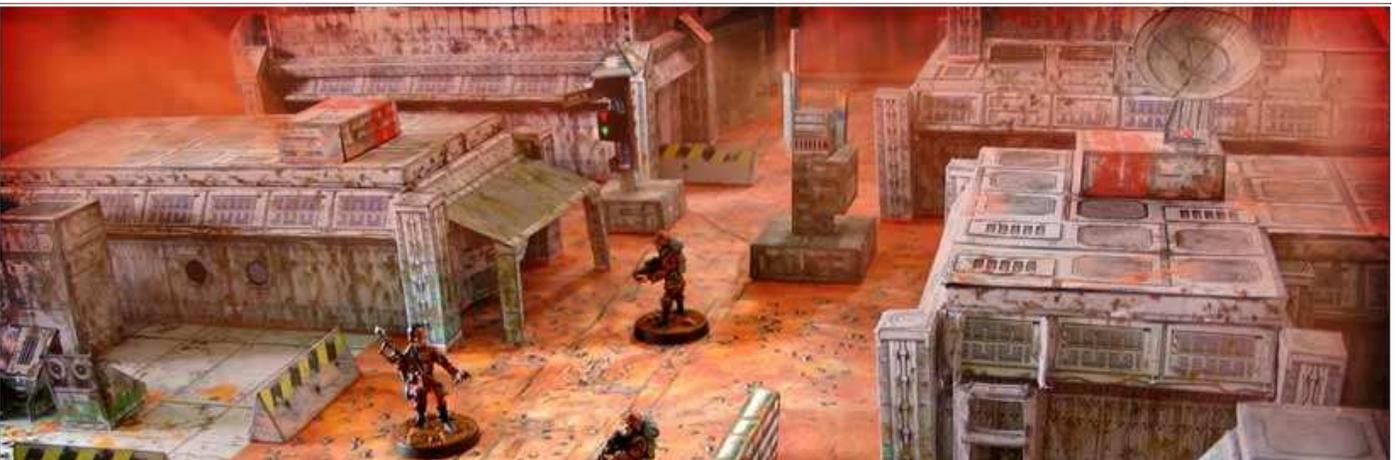
The learning curve for doing this type of model is very short and even my early results look good enough to me. After trying everything in the product at least once I've decided I don't like the canyons and to not bother with interior walls. Despite that I love the product and look forward to purchasing another download with more vehicles in it. A Simple and small one story building can be slapped together in a little over an hour but a complicated multi-story building with all the frills added can take close to three hours.

Because of my hardware difficulties I printed my card stock for these models at the local office supply store and found that building cost \$9 to \$18 depending on how many details I want in the model. It's tough to do a price comparison to resin models as they are not well represented on the market. All things considered I recommend World Works' products for their versatility, light weight and ease of use.

Mars Station includes all of the following:

1. 15 ground tiles - Mars terrain, industrial, floors and roofs. 1" Grid and No Grid options.
2. 20 modular building walls, interior and exterior, flat or angled roofs, railings.
3. Two man crawler.
4. Street props. Lamp/signpost, concrete barriers, stairs and catwalk.
5. Industrial props. Fences, five machines, horizontal and vertical storage tanks with base.
6. Our Revolutionary Canyon building system (well worth the price of the set all on its own!).

<http://www.worldworksgames.com/>



CLASSIFIEDS

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 Do you want to leave a crater where the enemy base used to be?
 Do you have little regard for collateral damage?

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Remember, close counts only in horse shoes, hand grenades and NUKES!

WARNING:
 UPF prohibits nuclear weapons on habitable worlds.
 Blast radius may exceed maximum range of the gyrojet rifle on low gravity worlds.

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STAR FRONTIERSMAN
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Submissions@StarFrontiersman.com



* Artwork by Scott Mulder

Tell us what you think this could be used for. Write to the Star Frontiersman at Submissions@StarFrontiersman.com

Joshua, who is eight, says; neutron grenade or spaceship part or life supply of medicine.

Join the Royal Marines of Clarion

Accepting applications now for well qualified individuals to fill positions in the Frontier's most elite naval force, do you have what it takes?

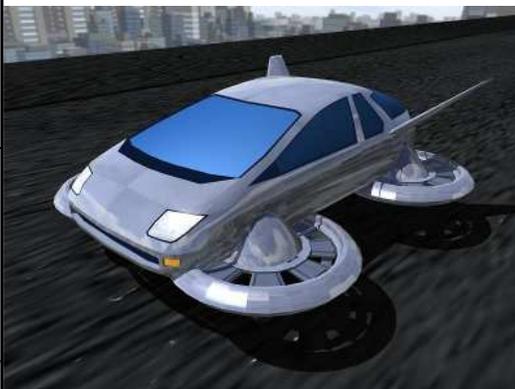


Adventure, Education, Clarion Citizenship and *Excellent Pay* Await You.
 Enquire at FrontierNet address:
<http://starfrontiers.info/forum/>
 Reference: **Warriors of White Light 2**

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Vehicles Unlimited

A division of **Trans-Travel** (Sengsen, Terledrom, Fromeltar) VU specialize in light transport air and hover vehicles. The HTC-20 pictured below offers state-of-the-art cushion control.



Starting at 16,500 Credits
 (Rental available fro 99 CR/day_

Refer to 33-050102000407060000-07

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WANTED DEAD OR ALIVE

Wanted: Tordia.
 Reward: 25,000 CR
 Reason: Holding illegal "Estate Sale".
 Backup:

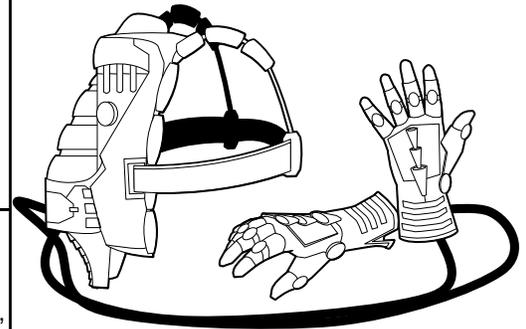
Chronocom Subspace Relay#
99388222220120201222

FLAMETHROWER GAUNTLETS

Modern Gardening announces the soon to be released tool no gardener should be without. This handy tool will kill off those pesky weeds hands down!

Flamethrower gauntlets are the most effective organic method of weed control.
 - *Frontier Gardner Magazine*

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Vehicles Unlimited ATC-20 Aircar



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Starting at 57,000 Credits
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