STAR FRONTIERSMAN
Magazine

Suit Up and Ride!

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LETTER FROM THE LINE EDITOR

Hey guys it's me Gergmaster from the development site. For the past few months we have been going through one heck of a recession in activity on the website and the magazine. Many people were pretty angry when the magazine did not arrive as planned, and for that I am very sorry to disappoint you guys. However, I have some good news. The last time I talked to Bill he said he wanted us as the community to start putting this magazine together. He would still contribute, but with his small amounts of free time he has not been able to keep up with it as much as he likes. So, if you really want to get the magazine going again at its old monthly rate you will need to contribute more. By this I mean if you are able to help format volunteer, if you have submissions send them, or anything that might contribute greatly to the magazine do so. At the beginning of each month I'll start a forum topic to get every interested in posting for the next issue. Please if you have submissions submit them to the Star Frontiersman website, and not the Star Frontiers Development site.

Also remember this is now a community project like Bill wants it. So do him a favor and help out. Tell friends about it. Get some projects going on the development site or across the web. Please keep a positive attitude towards other peoples' ideas. If people believe in changing the rules to adapt t their game hear it out, or if someone wants to change the story line to Star Frontiers let them go for it. The best thing about Star Frontiers is that it has loose canon and rules, which means we are able to support many different ideas.

One last note, I want to thank all of those who helped get this late issue out for all of you. Hope to see you help out in the next issue.

Greg Rapp (Gergmaster)
editor@starfrontiersman.com

On the cover: Mark Garlick is an exceptional artist, and graciously gave us permission to use his artwork for the covers. You can be sure to find more of his imaginative pieces on future covers. Check out a sample of his works at http://www.markgarlick.com.

A SKILLED FRONTIER

By Bill Logan

A SKILLED FRONTIER

Whenever you ask someone what the biggest hole in Star Frontiers rules is, they point at the skills system. When TSR wanted to address this, they came up with Zebulon's Guide to the Frontier, which added more than one hundred and twenty skills, and modified the whole game system in the process… which alienated many. This article has a newly proposed, play-tested skill system for your gaming enjoyment.

Author's Note: I analyzed the existing Star Frontiers skill system and came up with a number of problems that I tried to resolve with this article:

Problem 1: Not enough skills
This is the obvious one. The Frontier has a plethora of skilled artisans, entertainers, diplomats, secret agents, and rogues. It also has pilots, criminals, archaeologists, and physicists. However, if you create a character in canon Alpha Dawn rules, you can be one of three basic archetypes with only slight permutations. There needs to be more to flesh out a character, even if some of the skills will only be selected for NPCs. Not every diplomat should have to be a psychiatrist to be effective.

Problem 2: Focus on Military
A soldier is good with guns and combat and demolitions. That's expected. A technician is good with computers, robotics, and technology. That's great. A scientist is good with environmental science, medicine, and parapsychology. All of that makes sense. But why is it that a soldier can excel in all of his skill areas so much more rapidly than a non-military character? For example, it's not fair to me that, just because my character concept is scientific, your soldier will reach level 6 in his demolitions skill up to **ten** adventure sittings before I'll reach level 6 in my environmental skill! Who decided what was easy and what was hard? Some guy sitting at a desk at TSR did. Shouldn't it vary by character concept rather than by skill? Shouldn't my scientist character concept have as easy a time advancing in science-related skills as your soldier character concept has advancing in military-related skills? The current system favors the military character, not the creative concepts of the player.

Problem 3: Level six is unrealistic
In all the games I ever played, not one single character ever reached level six in a skill. Think about it… if your character is a technician with a level 5 skill, to attain level 6 he has to spend 24 experience points. That's 3-5 adventures without seeing a single tangible piece of progress… just to get +10% chance of success to a skill that is part of his core concept. Those 24 experience points would probably be better spent on military skills to help keep the character alive, or even better yet – to increase your Dexterity by 24… that's far more helpful than an extra 10% to fix your ground car. The skills need to be less expensive to increase levels.

Problem 4: Ability Scores don't help skills
A character with a high Dexterity or Logic abilities should have a better chance of disarming a bomb than an equally-skilled character with low core ability scores. That's just common sense. A character with better Personality and Leadership should be more successful persuading someone than a character with psycho-social skills and low scores. Some would say this is for game balance… but that is simply not the case. TSR realized they needed to base combat off ability scores – they just overlooked the weight that ability scores should have on non-combative skills.

Problem 5: Arbitrary Success Rates
It seems completely arbitrary that one sub-skill is rated at **50%+10%xLevel** while another is **35%+10%xLevel**, etc. Some are 100% - some difficulty. They're all in obvious. In addition to this, the list of sub-skills associated with each skill seems to box-in a player's creativity. For instance, what happens if a robotics expert wants to buy a robot at a shop? Wouldn't his skill with robots alert him if he's going to buy a lemon? Or should he get a roll? Which sub-skill applies? If none of them do, the Referee makes one up on the spot or else allows him an Intuition or Logic roll, making up modifiers on the spot. That's inconsistent because why would his INT or LOG help this roll, but wouldn't help his chance to program that same robot? Such inconsistency results in too much speculation and too much time looking up numbers in tables, and most good Referees I've played would simply make stuff up as they go rather than be slaves to charts and tables.

PROFESSIONAL SKILL AREAS

There are nine professional skill areas (PSAs) describing all potential aspects of a character's knowledge and ability. None of these PSAs are skills unto themselves, but instead a categorical collection of related skills. For example, you won't have a military

skill; instead you'll have a melee weapons skill or a demolitions skill.

CHARACTER GENERATION

All players must decide which PSA is primary to their character concept, and which two are secondary to it. List one PSA with a "P:" next to it. List two PSAs with an "S:" next to them. All other PSAs are tertiary to your character concept.

Your character will begin with three level 1 skills. One of which must be from your character's Primary PSA. The second can be from any Primary or Secondary PSA. The third can come from any PSA (even one tertiary to your character concept).

For example, your character's primary PSA is Military, and your secondary PSAs are Tech and Agent. You begin with three level 1 skills. One of which must come from your Military PSA, the other may come from any primary or secondary PSA (Military, Tech, or Agent). The third can come from any PSA you want. You select Beam Weapons level 1 from Military, Robotics level 1 from Tech, and Survival level 1 from Scout.

SKILL CHECKS

Where are the sub-skills? Where are my character's chances of success listed? The existing Alpha Dawn skill system requires lists and tables to be present at the gaming table, something that has been an antiquated idea since the early 1990s in role-playing evolution. This skill system takes its mechanics from the way Alpha Dawn expressed chance of success in combat. However, this helps keep your ability scores relevant even when testing one of your character's skills.

To make a skill check, use 1/2 your character's ability score relevant to the situation, then add 10% per skill level. This applies to any roll having anything to do with that skill. There is no list of "sub-skills" defining what you can do with a skill. For example, if you have a Survival skill (from the Scout PSA), you get to make any roll having to do with survival (finding shelter, hunting, gathering, etc.) in the same way. Modifiers apply based on any situational condition the Referee decides what applies. The ability scores in Star Frontiers are sufficiently comprehensive that it should become obvious which ability score applies to which situation.

Example: A robotics expert (someone with skill levels in Robotics, a skill in the Tech PSA) would be using his Intuition coupled with robotics skill when guessing where an access panel might be located on an attacking alien robotic technology, however if he were repairing it, he might be using Logic. There may even exist situations where the robotics skill could be used in conjunction with Dexterity or even Persuasion (haggling over the price of robotics parts with a chop shop owner?). In each of these cases, the player would use half of his relevant ability score added to 10 times his skill level.

STANDARD RULES

Many skills from the tech skill area involve repairing equipment. These will use the standard repair rule from Alpha Dawn rulebook. Application of medical science can use the standard rules from Alpha Dawn as well, or a simpler mechanic: a successful Medic skill roll will heal a number of d10 equal to the medic's skill level, but require a like number of hours of recovery (thus a 3rd level medic might roll 3d10 and get 15... meaning he heals 15 STA if the patient rests 15 hours afterwards). If the full period of rest isn't taken, the healing will be halved.

UNSKILLED SKILL CHECKS

If you are asked to make a skill roll for a skill that is from your primary PSA, yet you have no skill level in that skill, you may (if the Referee allows, based on the situation) use 1/2 your attribute but add nothing for skill level. This is called an **Unskilled Skill Check**. If you are asked to make a skill check for a skill you don't possess and is one that is from another PSA, you can only succeed on a 01-05 (which is an automatic success in Alpha Dawn rules). Unskilled skill checks can be abused by players, and Referees are to be the final arbiter in such situations.

For example: Uwan is a yazirian fleeing for his life from natives on a dangerous world that he has gotten himself stranded on. As he rounds a corner in the canyon, he sees a place he thinks he can quickly climb up to a higher level. He needs to do this before the natives round the canyon, or they'll see him climbing and he'll be in trouble. His player, Fred, is told to make a climbing check using his Reaction Speed. His character's primary PSA is Scout, but he never thought of devoting any experience points to an athletics skill. He is allowed to use 1/2 his Reaction Speed score and use 0 as his skill level. Since his Reaction Speed is only 45, he has a 23% chance. He fails, and is half-way up the canyon wall when natives round the corner, spears in hand. Fred decides that after the adventure, he'll buy a level of athletics if his character survives!

CHARACTER ADVANCEMENT

Instead of keying the costs of individual skills to the skill area itself (as it was done in Alpha Dawn rules), the costs are keyed to your PSA selections, thus rewarding a solid concept. Some people are good at learning sciences, some are good at learning languages, and others might be natural born pilots. Whichever PSA is chosen as your character's primary one will have the easiest experience point progression. Your secondary PSAs will advance slightly slower, and all other skills will advance slowest still.

After earning experience points, players may spend them on new skills or to advance skills they already have. The cost of the new skill level depends on whether the PSA which governs that skill was important to the character concept (i.e. was selected as either Primary or Secondary to your concept). The

table below summarizes experience point costs, and examples follow.

TABLE: EXPERIENCE POINT COSTS

Skill Area	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Primary	3xp	6xp	9xp	12xp	15xp	18xp
Secondary	4xp	8xp	12xp	16xp	20xp	24xp
Tertiary	8xp	16xp	24xp	32xp	40xp	48xp

*Example: Logan is quite good at technical things. He can't change that about himself. Tech PSA is **primary** to his concept. He's quite knowledgeable in many obscure areas and therefore Scholar PSA is **secondary** to his concept. Finally, he's a fair artist and that creativity often gives him insight to troubleshoot where hard facts fail him. Artist PSA is also **secondary** to his concept. All other skill areas are **tertiary** to his concept.*

He advances best at technical skills. He advances fairly well with artistic and scholarly skills, and all other skills require him to put in extra effort to master. It's just the way he's built.

*He begins play with three level-1 skills, and his player selects Computers, Robotics, and Visual Art. After a game session, the player earns 7 experience points. Since Tech skills are primary to his concept, it would cost 6 experience points to advance Computers or Robotics to level 2. Alternatively, he could buy a new level 1 Tech skill for 3 experience points. If he wanted to purchase Level 1 in Pop Culture (a Scholar PSA skill), it would cost 4 experience points because Scholar is **secondary** to Logan's character concept. He can't currently afford to increase his Visual Art skill, because Artist is a **secondary** PSA and would cost 8xp when he only has 7xp. Finally, if he wanted to buy a new level 1 skill with medicine (from the Scientist PSA, which is completely tertiary to his concept), it would cost 8 experience points, which he cannot currently afford.*

OPTIONAL RULES
The following are optional rules that you can use at your own discretion.

OPTIONAL RULE: LINEAR SKILL DEVELOPMENT
The existing experience point advancement system is not congruous with the rest of Star Frontiers rules. It costs more per level with higher skill levels, but ability scores can be increased on a linear 1:1 basis. The end result is people will end up with 100's in important ability scores long before sinking the high costs into their sixth level of skill. I kept this progression the same in the proposed skill system described in this article, but consider this optional rule. Instead of the experience point cost chart, simply use the following:

TABLE: LINEAR EXPERIENCE POINT COSTS

Skill Area	Experience Cost
Primary	3xp per level
Secondary	4xp per level
Tertiary	8xp per level

If your character has a skill level of 5 in a Secondary PSA skill, it costs 4xp to raise it to skill level 6, period. You will see skill development become the primary means of character advancement quite quickly, since it only costs 3xp to get a +10% chance of success in a Primary PSA skill. This makes the game mechanics break away from the standard Alpha Dawn rules, but is an interesting option nonetheless.

OPTIONAL RULE: NON-LINEAR ABILITY SCORE DEVELOPMENT
As an alternative to the optional rule above, you could change the ability score advancement to be non-linear. Doing this, you have to keep track of what the original score was and record your development as additional plusses. For example, if you increase your Dexterity from 50 to 55, you'd record it as 50+5 to remember how much of it is from development and how much of it is natural. Then consider using the following table:

TABLE: NON-LINEAR ABILITY SCORE EXPERIENCE POINT COSTS (*per +1 to ability score*)

Ability Scores	Up to +10	Up to +20	Up to +30	Up to +40	Up to +50	Up to +60
Physical Ability Scores (STR, STA, DEX, and RS)	1xp	1xp	2xp	2xp	3xp	3xp
Social Ability Scores (PER, and LDR)	1xp	2xp	2xp	3xp	3xp	4xp
Mental Ability Scores (INT, and LOG)	2xp	2xp	3xp	3xp	4xp	4xp

Experience Point Costs are per +1 to ability score. Therefore, it costs 1xp per +1 to STR up until you have +10, then it costs 2xp per +1, etc. The highest you can ever boost an ability score is +60, which should be quite rare indeed.

THE SKILL AREAS
Rather than provide an exhaustive list of skills, this system provides nine categories of professional skill areas. Individual skills are to be drawn from these PSAs. After each skill name is an example of the types of situations where that skill might come into play. This is meant to be a short example, not a comprehensive list of all situations.

AGENT PSA

The Agent professional skill area governs those specialty skills associated with activities often outside the law. They deal with deception, coercion, theft, and espionage. Skilled agents can slip into an area, carry out a mission, sense any traps you've prepared for him, and if caught convince you to let him go. The Agent PSA consists of the following skills:

- Stealth (rolls apply to prowling, hiding, shadowing, concealment, etc.)
- Persuasion (rolls apply to con, charm, convince, intimidate, etc.)
- Thievery (rolls apply to lock picking, pocket picking, forgery, sleight of hand, etc.)
- Detective (rolls apply to listening, spotting clues, gathering information, surveillance, searching for weapons, reading body language, etc.)

ARTIST PSA

The artist professional skill area covers skills designed to create and interpret various forms of expression. Effective professional artists have a creative streak that permeates everything they do in life. Creative individuals have an easier time learning to play musical instruments, write elegant speeches or songs, sculpt things from various materials, and draw/paint their visions to canvas or paper. The Artist PSA consists of the following basic skills:

- Visual Art (rolls cover creation or interpretation of drawings, paintings, photographs, holovideos, etc.)
- Structural Art (rolls cover creation or interpretation of sculptures, pottery, woodcraft, leatherwork, etc.)
- Composition Art (rolls cover creation or interpretation of poetry, stories, articles, music scores, songs, etc.)
- Performance Art (rolls cover acting, singing, musical instruments, dancing, mime, or other forms of performance art)

LINGUIST PSA

The linguist professional skill area is for those individuals determined to speak, read, and write every language in the Frontier. Although few player characters would select this as their Primary PSA, many may wish to purchase individual skills. Purchasing languages is handled simply: **level 1** allows for basic/halted/limited conversation, **level 2** allows basic/limited reading and writing, **level 3** means your character is fluent with a strong accent but can read/write effectively, **level 4** is completely fluent and completely literate, **level 5** is able to pick up and simulate local dialects, and finally **level 6** is a mastery normally reserved for those raised to speak to the language, indistinguishable from a native. If you want to get around in an area, building a language skill to level 2 is typically sufficient. Starting players are automatically considered level 6 in the languages of their native race and level 5 in Pan-Galactic. The

Linguist PSA consists of the following basic skills, but more languages can be found throughout the Frontier:

- Human Languages
- Dralasite Languages
- Yazirian Languages
- Vrusk Languages
- Pan-Galactic

MILITARY PSA

The military professional skill area represents the specialized form of destruction practiced by soldiers, mercenaries, and even private bodyguards. Military specialists are unfortunately common throughout the Frontier. Effective military specialists can take out their enemies with speed and precision. The Military PSA consists of the following skills:

- Beam weapons (roll defines chance to hit with beam weapons)
- Space Energy Weapons (roll defines chance to hit with energy-based starship weaponry)
- Space Rocket Weapons (roll defines chance to hit with rocket-based starship weaponry)
- Gyrojet weapons (roll defines chance to hit with gyrojet weapons)
- Projectile weapons (roll defines chance to hit with projectile weapons)
- Archaic weapons (roll defines chance to hit with archaic ranged weapons)
- Unarmed Combat (roll defines chance to hit while unarmed)
- Melee weapons (roll defines chance to hit with hand-held weapons)
- Thrown weapons (roll defines chance to hit with hurled weapons)
- Demolitions (roll includes chance to set or deactivate an explosive charge)

PILOT PSA

The Pilot professional skill area covers the operation of vehicles, military or otherwise, in stressful situations. A skilled pilot can maneuver his vehicle through tight confines, across dangerous terrain, and recover from losses of control. The following skills comprise the Pilot PSA:

- Ground vehicles (roll for control of ground cycles, cars, and transports)
- Hover vehicles (roll for control of hover cycles, cars, and transports)
- Water vehicles (roll for control of boats, ships, and submarines)
- Air vehicles (roll for control of rotor-wing, propeller-, or jet-based air vehicles)
- System vehicles (roll for control of shuttles and fighters and short-range transports)
- Space vehicles (roll for control of large spaceships capable of FTL speeds)

SCHOLAR PSA

The scholar professional skill area involves skills that are all about knowledge. Even if that knowledge isn't quite scholarly, it falls under this skill area. Effective scholars can draw parallels between literary and historical events and apply them to what is going on around them, giving them an insight that unscholarly people might lack. Note that all rolls for scholarly skills can be made twice: first to see if you know the fact, and second to research it if you don't know it. The Scholar PSA includes the following skills:

- Literature (rolls involve knowledge of authors and their writings)
- History (rolls involve knowledge of the past, or researching past events, people, or places)
- Politics (rolls involve knowledge of the inner workings of politics and bureaucracies)
- Economics (rolls involve knowledge of the financial infrastructure of the Frontier)
- Pop Culture (rolls involve knowledge of present people, places, and events)
- Law (rolls involve knowledge of -and around- the laws throughout the Frontier)
- Philosophy/Theology (rolls involve knowledge of the religions and philosophies of the Frontier)

SCIENTIST PSA

The scientist professional skill area covers those skills that deal with the living, chemical, or physical laws of the universe. Scientists give names to the unknown, bringing them into the realm of the known. A skilled scientist develops ideas or diagnosis, plans experiments, and proves theories. Whether they're in it for the discovery or for the glory, scientists are part of what makes the Frontier an exciting place. The Scientist PSA is comprised of the following skills:

- Medic (rolls deal with the diagnosis and treatment of infections, disease, toxin, and injury)
- Psycho-Social (rolls deal with the study of the psyche, hypnosis, and the unconscious mind)
- Environmental (rolls deal with terrestrial land, water, and air sciences)
- Space Science (rolls deal with astrogation, spatial physics, and starship engineering)

SCOUT PSA

The scout professional skill area includes those skills the outdoorsman would require. Effective scouts can live off the land and survive adversity off even complex environments if they have the right materials handy. The following skills comprise the Scout PSA:

- Animal Handling (rolls include influencing animal behavior, riding, husbandry, etc.)
- Athletics (rolls include climbing, running, jumping, etc.)
- Survival (rolls include procuring shelter, hunting, tracking, building fire, etc.)

- Navigation (rolls include finding way in wilderness, charting new courses).
- Mariner (rolls include swimming, diving, operating terrestrial watercraft, etc.)

TECH PSA

The Tech professional skill area includes those skills that deal with the repair, configuration, programming, and engineering of technology. Effective Techs can repair damaged goods in adverse conditions, operate technological devices to their fullest, and reprogram captured enemy or alien technology for their own use. The following skills comprise the Tech PSA:

- Technician (rolls include operation, accessing, and repairing vehicles and machines)
- Computers (rolls include programming, interfacing, hacking, and repairing computers)
- Robotics (rolls include programming, accessing, configuring, and repairing robots)

MORE SKILLS

Although a list of skills exist under each PSA shown above, these lists are not exhaustive. Players are encouraged to develop their own ideas for skills to complete their character conceptions. This skill system is designed to focus on the character concept. Referees must approve the skill and the PSA under which it falls. Different players may even have the same skill under different skill areas if the Referee allows, representing different types of skill training.

For example, Sarah wants her character to be good at data encryption. She looks through the skill lists and can't find that particular ability. She suggests it should fall under the Agent PSA. The Referee likes the idea and approves. Robert's character is a Military specialist and also wants skill with data encryption. He asks if he can have a data encryption skill under his Military PSA and the Referee might allow it. In the end, they are both the same skill, but the training was derived from a different source. When decrypting military data, Robert's character is the obvious choice, though really they are both able to perform the skill the same.

Be aware that if you allow the same skill to exist under different PSA's, some players may abuse that ("My character learned to shoot Beam Weapons in the university, so can it please be covered under my Scientist PSA?").

Author's Note:
The defining factors about this skill system are the following:

- **More PSAs**. There are nine PSAs for your character to choose from instead of only four

(Alpha Dawn had three, and Knight Hawks added Spacer skills, an unnamed fourth PSA).

- **More Skills**. The original game had eighteen skills (thirteen from Alpha Dawn, five from Knight Hawks). This system has 48 skills, and extreme effort was made to make these skills comprehensive. However, new skills can be made and hopefully it will be quite obvious and instinctive under which PSA a newly-developed skill should fall.

- **Easier Gameplay**. The elimination of predefined lists of "sub-skills" and the requirement to look up their individual success rates and special rules have been eliminated, being replaced with a streamlined common rule to use in all uses of a skill. No more looking things up in-game.

- **Secondary PSA**. To make your character more unique, you select a Primary PSA like always, but also select two Secondary PSAs. This is possible because of the added number of PSAs, and helps make your character more individual. For example, a character conception that is P:Military, S:Scout, S:Pilot is quite different than P:Military, S:Agent, S: Scholar. In the original Alpha Dawn system, they both would have been Military PSA characters.

- **Experience Costs**. The cost to purchase skill levels has changed. Rather than encouraging military skills this system encourages staying within your character concept. You'll pay the cheapest cost for skills within your Primary and Secondary PSAs. This is to help encourage strong archetypes, and reward players for staying within their character concept. In the original Alpha Dawn game, the Military PSA characters achieved more skills and more skill levels than those in the other PSAs because their skills were simply much cheaper.

HEADSET COMPUTER
BY WILLIAM SIGNS

Replacing the chronocom completely by f.y. 95, the headset computer combines a communicator, a Level 3(8 function points) computer, a holoprojector and a chronograph into a unit which fits around the wearer's head.

The holoprojector is a reticle extending from the earpiece and fitting over the wearer's right eye, while a microphone extends from the earpiece to just below the user's mouth. The computer itself is built into the brace leading from the top of the earpiece and wrapping across the top of the user's head.

The headset computer (or headset comp) is operated solely by voice command and has several ports alongside the earpiece to run standard data cubes.

The headset comp weighs in at 0.5 kg, due to lightweight materials, and costs 10,500 credits.

[NOTE: I drew the inspiration for this from G.E.A.R. used in the Steven Spielberg sci-fi series *Earth 2* (which I liked better than *Sea Quest DSV)]*
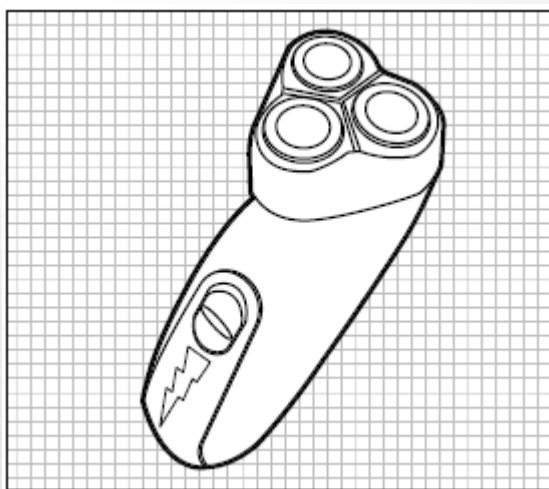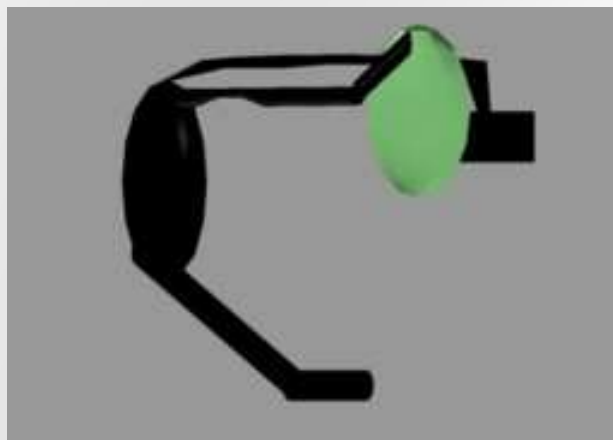
NORELCO SPEEDRAZOR T22.A

Weapon Name	Norelco Speedrazor
Skill Used	Melee (-10 to hit)
Damage	Shave, close and clean
Ammunition	20 SEU Power Clip, drains 1 SEU per minute in use
Rate of Fire	1 shot per turn
Defense	n/a
Range	Point Blank
Cost	34 Cr (Wal'Martkur - 29.99 Cr)
Mass	25g

ARTISAN SKILLS (PSA)

By Kevin
Smoot

There are many different Artisan Skills. Grouped within the Artisan PSA are Artist Skills, Performance Skills, and Tradesman Skills. Each type of artistic expression that produces a tangible product (a painting, a sculpture, an artistic array of grown crystals, a musical score, etc) is associated with its own particular Artist Skill. The Trade Skills are used for income or to produce materials, although the tradecrafts are arguably based on less artistic endeavors such as construction, masonry, pottery, landscaping, gunsmith, archaic weapon crafter, and similar professions. Performance Skills cover many types of expression such as musical instruments or singing, as well as the skills involved with acting, comedy, or other oratory skills. Particularly artistically minded characters might choose Artisan Skills as their Primary Skill Area so that they might explore several different kinds of trades. As an example, Leonardo Da'Vinci was an artist, sculptor, and inventor among his many interests.

All the Artisan Skills are useful for creating complex characters with interesting backgrounds, and they provide a means of filling a character's downtime. The Performance Skills and Tradesman Skills can have certain benefits under special campaign circumstances, but more often they are simply used for non-player characters to express a measure of theirs skills relative to others and quantifying their earning capabilities. If the Referee chooses to allow players to take skill levels in these skills, he might grant special circumstance bonuses when a situation involves the particular skill. For example, a character with Performance (acting) skill levels might receive a bonus on a Personality (PER) check when trying to mislead another individual or a character with Trade (construction) skill levels might receive a bonus to a Logic (LOG) check while examining building stability after damage from a terrorist bombing. The Referee has final say for these special circumstances and the bonuses granted for such characters.

On the other hand, the Artist Skills can be used for more than just income generating. Books and movies, such as "The Da'Vinci Code", "National Treasure", or possibly even "Raiders of the Lost Ark" give great inspiration for adventurous applications of artistically related skills. Interpreting clues left hidden within the subject matter of a painting, or the realization that a particular piece of sculpture is really a key for unlocking a great secret, are great concepts for adventure.

Artisan Skills can sometimes be hard to distinguish. For instance, while acting is more of a performance skill involved with interpersonal communication (convincing others to believe the character's rendition), holo-video production or filmmaking would be an Artist Skill. The playing of a musical instrument is definitely a performance and not an Artist Skill, while songwriting or composing an orchestral piece is. When a player proposes a new 'art form', the Referee should think very carefully before deciding which particular skill set to apply.

ARTIST SKILLS

The aspiring artist chooses a specific craft or art form. Each craft or art type has its own associated skill. There are five separate sub-skills associated with each Artist Skill: *Appraise Art*, *Create Art*, *Create Masterpiece*, *Interpret Art*, and *Restore Art*. Some sub-skills (*Appraise Art* sub-skill or *Interpret Art* sub-skill) can be applied to art pieces of different disciplines than the skill user has, but the chance of success with the sub-skill will be lower than a true practitioner would have.

As a character advances in his/her profession, their works become more impressive, renowned, and valuable. At level one, the character might not even be able to support a decent lifestyle with the craft, but by level six, the character is considered a master. The experience point requirements are equivalent to biosocial skills, but the suggested earnings are not linear like other skills (see Hiring NPC's in the Referee section of the Alpha Dawn rules). Additionally, not all art forms are equivalent in perceived value. Remember that the Referee has complete discretionary control over the values presented. The following table summarizes experience and suggested earnings, although the Referee may adjust the figures to suit the campaign circumstances. Note the 'starving artist' levels early on, followed by exceptional earnings in the latter levels. See *Create Art* sub-skill for additional earning details. These values are for Artist Levels only, as NPC earnings for Tradesman or Performance skills could vary widely.

ARTIST EXPERIENCE COST AND PAY

Artist Skill	XP	Earnings/day	Earnings/Month
Level 1	5(10)	10	200
Level 2	10(20)	20	400
Level 3	15(30)	30	600
Level 4	20(40)	50	1000
Level 5	25(50)	80	1600
Level 6	30(60)	120	2400

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APPRAISE ART

Success Rate: 10% + skill level + notoriety adjustment

The practitioner of a particular type of art is usually the best judge of the value of similar types of works. Other artists can also judge the relative value of artworks unrelated to their own craft, but the accuracy of their assessments can be lacking. Objects that are well known or associated with famous artisans are generally easier to valuate, as there will be similar reference pieces or materials to aid the estimate.

The <u>Referee secretly rolls the appraisal check</u> for the player. Adjust the chance for success according to notoriety (see table below). A small bonus may be granted for using advanced inspection or forensic study of the artistry. When a practitioner of another art form does appraisals, apply a 20% penalty to the check (such as painter appraising sculpture). Success indicates to the character the approximate value of the art piece. Failure provides a false value to the player, either plus or minus of the actual value. The Referee may either choose the value or adjust according to how far from success the roll was. An over-estimated art appraisal is equally likely as an under-estimated quote.

ARTIST'S NOTORIETY TABLE

Artist's Notoriety	Modifier
Obscure, Ancient, Alien works	-20%
Unknown artists, Older works	-10%
Average Notoriety, Contemporary	+0%
Well-known art or artist	+10%
Ultra-famous Art or Artist	+20% (example: Da'Vinci, Michelangelo, Mona Lisa, etc.)

CREATE ART

Success Rate: 30% + skill level + situational penalty or bonus

Creation of art is the relevant skill for income earning. Full-time dedication to the craft is assumed, although this does not necessarily preclude other adventuring, so long as the character can come back to his or her work regularly. The check also assumes a relatively quiet workspace with appropriate craft tools available. The Referee may grant a bonus of 10% for a full studio or special workplace, and may also impose a penalty of –30% for the lack of appropriate workspace.

The player should roll for success only once per month. Failure indicates that generally substandard pieces of art were produced resulting in only half of normal wages. Success indicates the appropriate income is earned according to the table listed above, although these are only suggested figures. Should the character not be able to dedicate the appropriate amount of effort, the Referee should deduct from the income heavily, in a disproportional manner, as artwork requires dedication to the craft. This is intentionally a little vague to give Referee discretion to deduct heavily

for characters that do not make their art a priority. Although daily earnings are listed, Referees may (recommended) determine their pay on a monthly basis to reduce the tedium of this kind of record keeping. It is solely the discretion of the Referee, but if the Referee decides that a character's work is becoming more renown, trendy, or otherwise more or less valuable, he may adjust the earnings figures accordingly. This could be an adjustment based on local trends or preferences. What is trendy on New Pale might be almost worthless on Dralasite worlds.

CREATE MASTERPIECE

Success Rate: 10% + skill level

Create Masterpiece sub-skill is used when the character wants to forgo the normal earning mechanism and chooses to instead work on one or more exceptional pieces of art. In order to attempt this sort of endeavor, the character must forego any 'adventuring' and usually sequesters himself away to avoid distraction. The character must have the facilities of a full studio or dedicated workspace at his exclusive disposal as well. Failure to meet these requirements will result in automatic failure in any attempt to produce exceptional works. Minor breaks or distractions are all right, but any major disturbance will spoil the efforts of the artist.

The player should roll for success once for a month's worth of work. Failure indicates that instead of a masterpiece, the artwork or craft is substantially flawed or otherwise worthless. No income will be generated at all for the efforts. Success indicates that a piece of art worth substantially more than the norm has been created. The artwork is often worth at least double the normal month's wages, but unlike the Create Art sub-skill where cash revenue is automatically generated, a buyer must be located to purchase the art piece. Some characters might want to keep such pieces for themselves, donate to museums, or place in private galleries. The Referee is free to make these situations into role play events if desired. Referees should roll d% and consult the following table for guidance on art valuation.

Die Roll	Result
01-50	1.5x normal earnings
51-75	2x
76-90	3x
91-95	4x
96-98	5x
99-00	10x roll again and add results

For example, a work like the Mona Lisa would be a situation where multiple results of 99-00 were rolled consecutively (very rare)…

INTERPRET ART

Success Rate: 10% + skill level + notoriety adjustment

Interpreting artwork is generally a subjective skill, often generating many differing opinions. Still, there are usually certain core qualities, attitudes, hidden meanings, or even messages within the subject matter

of a piece of art. Use of the Interpret Art sub-skill allows the observer to notice the 'intent' of the artist.

The <u>Referee secretly rolls the Interpret Art check</u> for the player. Adjust the chance for success according to **notoriety** (see table above for Appraise Art sub-skill). When a practitioner of another art form interprets the subject matter of a piece of art, apply a 20% penalty to the check (such as painter interpreting sculpture). Failure provides a false interpretation, and the Referee is free to 'make up' something to tell the player about the art or subject matter. Success provides the player with a generally correct assessment of the subject matter or uncovers some hidden clue within the artistry (assuming hidden messages exist).

RESTORE ART
Success Rate: 40% + skill level

Restore Art is the skill involved with care, restoration, and repair of works of art. This sub-skill is specific to a character's choice of artistry (for instance, sculptors do not have restorative ability with paintings). The character understands the basic techniques for handling art work, and may attempt feats of repair or restoration by the use of this skill. A minor flaw may be corrected by use of this skill, but destroyed works may not be 'resurrected'. Sometimes, certain damages are part of the history of a piece of art, and restoration is not always desired or may not change perceived values (for example, the Shroud of Turin is irrevocably damaged and it would never be repaired, or likewise the Mona Lisa is aged and would not be corrected, only maintained). The Referee may decide that a restoration job may actually detract from the value of a piece of artwork.

The player or Referee rolls the Restore Art check. Failure indicates further deterioration or damage, while success indicates that the desired care or correction was achieved. The Referee has the final say in how success or failure in the handling of art has affected the status of the art piece or its perceived value. For guidance, failure by a huge margin should indicate worsening conditions accordingly.

RAUPP ROBOTICS RR41 "FURY"

Anti-Infantry, Light Artillery Support Combat Robot

Level: 3, Can converse verbally
Type: Combat Robot
Body Type: Heavy Duty
Parabattery: Type 2
Move Mode: 2 tracks
Move Rate: 120m
Limbs: 2, Mechanical Arms
IM/RS: +6/60
Stamina: 500
Attack: 60
Damage: By Weapon
Programs: Attack/Defense, Search and Destroy
Equipment: Chronocom, IR Goggles, Compass

Weapon Systems:
Machine Gun
Damage: 10d10, Ammo: 20 Bursts, -/70/200/500/1km
Grenade Mortar
Damage: Varies, Ammo: 8 grenade shells, -/200/500/1km/2km
Typical Grenade Load Out:
4, Fragmentation Grenades 8d10
2, Incendiary Grenades 4d10+1d10x3 turns
2, Smoke Grenades -10 to hit

Cost: 17,526Cr

Description: Anti-Infantry, Light Artillery Support combat robot. A tank shaped robot about the size of a volkswagon. It has a triangular style track assembly. It has a 360 degree rotating turret with the machine gun mounted in it. In the rear of the robots body, there is an upward facing ball turret; that contains the grenade launcher. The front hull contains retractable manipulator arms to help facilitate loading, and manipulation of objects.
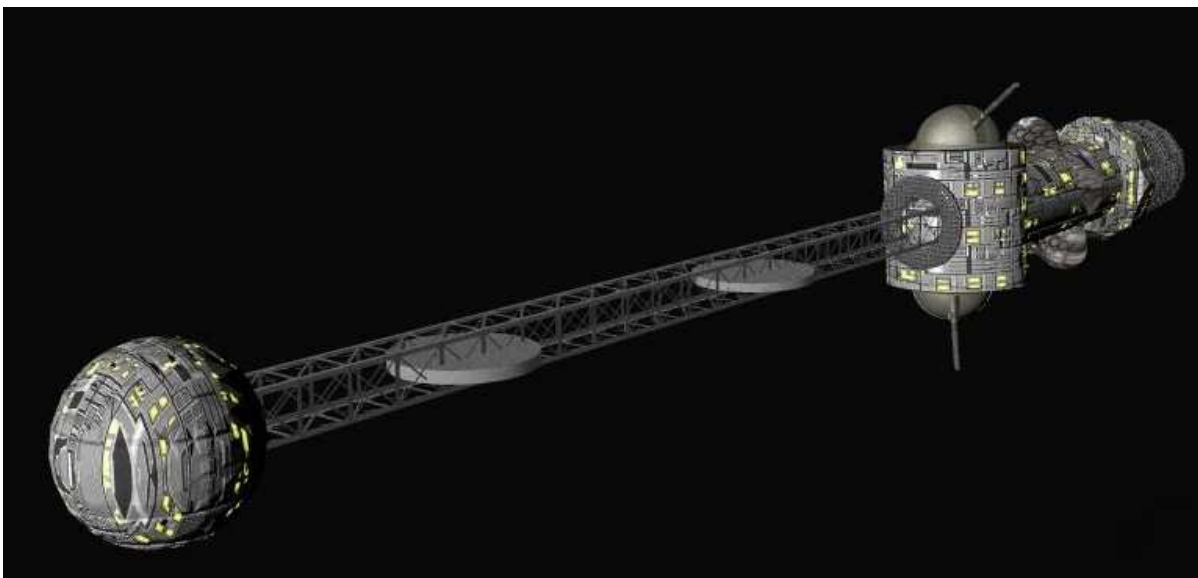
GREAT GAMING RESOURCES

By Greg Rapp

Sometimes it can be a big pain to find good gaming resources. Personally, I get lost trying to find some. Therefore, to help you fellow gamers out here are some great resources I found that can make gaming easier…

PODCASTS

The podcasting community is full of gaming podcast. Many of these gaming podcasts have great information on running a group, GMing, AI, creating races, and so on. I would recommend these two podcasts off the top of my head:

Fear the Boot Podcast: www.feartheboot.com
Dragons Landing Inn Podcast:
www.dragonslanding.com/dli

*Look at the podcast forums as well!

GAMING TIPS NEWSLETTERS

There are many of these out on the net that send either daily, weekly, or monthly tips.

One great tips newsletter is *Role-Playing Tips Weekly* (www.roleplayingtips.com).

GREAT READS

For the Sci-Fi Genre I can name hundreds of books that are great. However, many of the newer sci-fi books and some of the old schools books I found are listed here.

Starship Troopers: Great military science fiction by Robert Heinlein. Able to get the feel of military politics as well as the problems on the frontline that soldiers face in a more sci-fi based setting.

Star Wars: New Jedi Order: I know Star Wars has been lagging for years but the best sci-fi writers known in the industry did this series. It is a 21 book series with book ranging from 150 pages to 800 pages. Many concepts of alien races, galactic warfare, and even highly advanced technology are seen in this series.

Revelation Space Series: This is a series done by a popular sci-fi writer from England. All of these books follow most if not all of the laws set down by modern science. Even though the writer used to be an astrophysicist, he dumbs down concepts enough so you can understand them. Every bit of technology and science is technical which makes it interesting experience to read for the first time. Currently there

are I think six books in the series. Each book ranges from 600 pages to 1000 pages.

Saga of the Seven Sons: This great sci-fi series deals with manifest destiny in the stars. Humanity is ruled by a king and has many different factions that resent the King's power. Humans have made alien contact in this series. It is with a shy race that believes humanity is too greedy and profits from their losses. There is another race that was created by an ancient race that disappeared years before and since this race has gained their sentience. Nevertheless, to make a long series short I will say if you are looking for some great inspiration look into this series. There are seven books for the series if I remember correctly and most of them have come out so far. Remember each book should be about standard length 400-500 pages each, which makes them easy to read and stick with.

GREAT WEBSITES

Here are some great resource websites that you can use to pick up information on GMing, gaming in general, or even play a game with your group when you are long distances apart.

Role-Playing Games Network: This is a role-playing game website dedicated to having forums up so people can play with other players or even your own gaming group. Another great thing about this site is that it has a community dice roller with all of the dice you will ever need (do not have to worry about leaving your dice at home anymore).
www.roleplayinggames.net

How Stuff Works: I found this site through one of the gaming podcasts I listened to a few months ago. This site is great if you want to look up how certain technologies or concepts work. It is great for GMing purposes because you can use it to explain things you have no idea about what they are or how something is done.
www.howstuffworks.com

RPGNOW and DRIVETHRURPG: Both of these websites are probably the best in what they do. Since today many RPG publishers are going to selling electronic versions of their book and software, you can get your RPG materials for about ½ of the price. This makes it easier to get more stuff for your gaming group without having to pay hundreds of dollars in resource.
www.rpgnow.com
www.drivethrurpg.com

PLANTS NAMED SKREE

By Kevin Christian

SKREE

SKREE CHARACTERS

Characteristics

Average Size	2.3 meters tall
Average Mass	65 kilograms
Average Lifespan	320 years
Reproductive System	Hermaphroditic, Pollination
Body Temperature	Thermoneutral

Ability Scores

STR/STA	+5
DEX/RS	-10
INT/LOG	+10
PER/LDR	-20

Movement

Walking	10 meters per turn
Running	20 meters per turn
Hourly	3 kilometers/hour

Alien Lore	Skree characters are able to determine the function of alien artifacts. This also allows Skree characters to determine the origins of the artifact.

PHYSICAL STRUCTURE

Skree are large plant-based creatures with a vague anthropomorphic structure. The pod-like "head" that has several antennae-like stems that serve as sensory organs and has a number of leafy fronds at its terminus. The stalk has a bulbous torso area as well as a hip and groin area. The "torso" supports two arm-like vines that end in pads with the undersides possessing numerous small thorns allowing it to grasp and hold onto other objects. The arm-like vines also have two smaller tendrils near the large pads allowing for finer manipulation and grasping that the pads cannot do. The hips are supported by four strong root-like tendrils that serve as legs.

The Skree do not have a true musculature structure and do not possess a skeleton. Most of their organs are used to channel fluids throughout the body or for reproduction. The head-like structure does have a tough, fibrous organ that serves as the brain functioning in the same manner as any animal-based creature. Movement is achieved by pumping a thick viscous fluid through special cells located throughout the entire body allowing for a full range of movement by bending and twisting in much the same way as a snake.

Skree do not breathe oxygen but rather absorb carbon dioxide and other neutral gases through their skin and give of oxygen as a waste gas. They also absorb water through their skin and can extract some of the oxygen available allowing them to function fully underwater albeit under conditions similar to breathing in an atmosphere that is too thin. The Skree gain nourishment both through photosynthesis as well as by absorbing nutrients from soil or decaying matter.

SENSES

Skree possess excellent visual capabilities being able to see not only in the visible spectrum of light, but also in the infrared and ultraviolet spectrum as well. Their ability to sense color is limited to base colors (yellow, blue, and red) and only at short distances of no more than 20 yards with everything else being in black and white. Skree sense of smell is limited to detecting pheromones given off by other plants and being able to detect the minerals and nutrients needed to survive. Skree sense of touch is acute and their bodies are equipped with special sensors that can detect the electromagnetic fields of other living creatures out to a distance of forty meters. Their sensory stems can also pick up sound waves even those beyond human range but only out to a distance of twenty meters.

SPEECH

Skree possess a series of gas-filled bulbous organs in their torso area that can operate as a sort of bellows creating sound much in the same manner as a Dralasite, but more like a dry whisper or a ghostly moaning. Their own speech consists of a combination of pheromone scents, electromagnetic pulses, and complicated movement patterns.

SOCIETY AND CUSTOMS

Skree see themselves as a single overall entity. They all possess a distinct racial memory that connects each individual to the entire race as a whole and extends back to their prehistoric development. They are highly communal with each group providing for itself as a whole as well as contributing to the overall welfare of the entire race without much concern for individual welfare or needs. There are some who deviate from this group mentality but they are few and are generally shunned by others of their kind.

The Skree possess a love for music and also appreciate the natural surroundings of the worlds they inhabit, using their technology to conform to nature rather than forcing nature to conform to their needs. The sound of music in a great many varieties is always present throughout their communities at all times. Skree also practice a form of art that can only be seen in the infrared or ultraviolet wavelengths appearing blank to any other race without the ability to see in those wavelengths.

Skree generally do not wear clothes. When Skree wear clothes, they usually wear materials that are similar to that of the Dralasites' clothing to allow their skin to breath with ease.

ATTITUDES

To most other races, the Skree appear emotionless and devoid of personality. Their emotional state is too alien for other races to understand and their natural form of communication is well beyond other races. Dralasites have some ability to understand Skree and get along with them best of all. The Vrusk appreciate their communal society but distrust their lack of individuality. Humans and Yazirians find their appearance comfortable to deal with yet are disturbed by their apparent lack of emotion.

SPECIAL ABILITIES

The Skree have the ability to determine the function of alien artifacts as well as being able to connect artifacts to the same alien society if they have seen items from the same race before. They can only determine what the item is used for not how it works and they must have seen more than one item from the race in question to connect them and their function to the same beings. This ability equates to 10% accuracy, which can be increased by spending points through experience.

DESTINY RUN

By Chris Harper

Terl waited.... His visor became clear again as the opaque shield faded. His suit had shut down and deployed a gauss screen to avoid damage from electro-magnetic pulse. His visor blackened to save his eyes from the flash. The nuclear air burst had bloomed from a faint streak of light from orbit. The blast had come from New Brunner colony, 100 Kliks to the East. The colony ground forces must be taking a beating. The night sky glowed from the blast. The ground shuttered and rocked.

The Sathar Cruisers hadn't used 'nukes on the dirt until now. The UPF fleet in orbit must have them on the run. He could see intermittent flashes in the sky from the space battle.

Terl clicked his comm. He heard a guttural growl as Zerik Charged ahead. His battle suit took long strides as it got up to speed. The Yaz's battle suit ran and skipped over the rolling grassland.

Zerik, a Yazarian, was always quick to fight. No one was brave enough to ask if his mother named him after an ancient Yazarian battle axe or if he changed it himself. His impatience bordered on insubordination most of the time.

Terl stopped himself from halting Zerik.

"Let's follow 'em boys" he called to the other three in his squad.

Schafer, a human, fell in on the right. He was a new recruit from (White Light). Is anyone really from White Light? He must have known somebody to get commissioned for battle suit right off the bat.

Gorb-bol, a Dralasite, took the right flanking position. He was a newly promoted corporal. His happy go lucky attitude and bad jokes belied his strength and coolness in a fight.

(Kok Ting Gok) took the left. He was the son of some high power CEO in Zik Kit Industries. He left everything to become a grunt. Why would he do that? His power suit differed from the rest. His suit is a marvel of articulated parts to fit his ten limbed body.

They quickly formed a triangle formation. No one less than 200 meters apart.

Terl's 'comm sounded off as they all raced after Zerik. "Call out first contact" he reminded his squad.

Terl's suit sped up as he worked his legs in a stilted run to activate the amplifier motors. He soon felt the chassis react and lighten as he reached cruising speed, 60 Kph.

"Get to the Destiny colony's back door. Make an escape route for the colonists. Escort what is left of them to rendezvous with a fleet transport." Terl recited their mission to himself. Simple, assuming recon' was right; if there weren't too many Sathar troopers in the way. If the Sathar didn't decide to nuke' Destiny and be done with the whole thing.

After about 10 minutes Terl could see lights from Destiny colony on the horizon.

"Arrr Yarrrl..!" A Yazarian battle howl fed back through the com speaker. Zerik lept over a rock outcropping out of sight.

"Flanking positions!" Terl barked over the com.

He followed Zerik over the rocks. He saw Zerik charge a Sathar APC. It was a grav. vehicle flying fast toward them. The turreted fusion cannon got a shot off. It shot
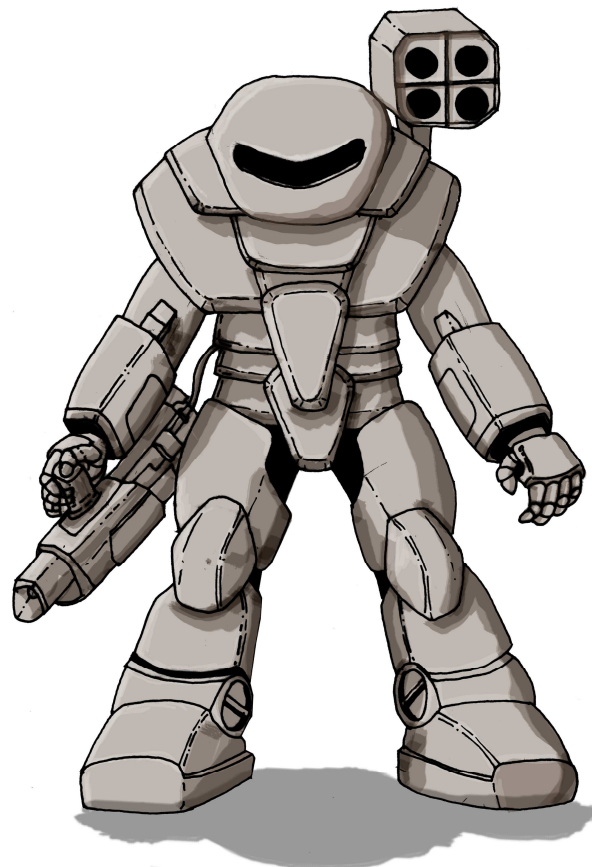
wide of Zerik. He jumped nearly 10 meters in the air and came down on the deck of the hovering APC. The force of the jump made the APC's front cowling dig into the dirt. It began to spin. Zerik clung to the barrel of the cannon with one hand and started firing a heavy machine gun at point plank range at the deck. Another shot crackled in the air from the fusion cannon. The APC spun and careened too much for Terl to get a clean shot. The heavy machine gun had opened up a good sized hole. Zerik was howling and ripping interesting pieces of equipment from the APC and hurling them. The APC flipped sending Zerik tumbling. The APC stopped rolling and was on fire.

Zerik howled in triumph.

"Contacts!" Terl's com shouted. It was 'Ting. "Two tanks about a Klik away."

Terl switched his tactical display to see 'Ting's. A glowing holographic image sprung onto his HUD.

"Lock missiles…" Terl was interrupted.

"Slug troopers!" Gorb snapped.

Clang, pop, thud, projectiles hammered at Terl's armor before he could get his inertia screen up. He could see three Sathar slithering across the plain about 200 meters away. He could make out two more setting up a heavy weapon further away. The three were steadily firing as they slithered.

"I must have been sleeping not to have seen them..", Terl chastised himself.
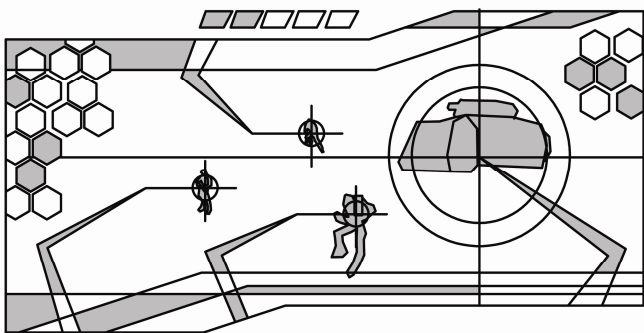
He flicked over to his weapons system and armed his "Stinger Pack." The targeting display gave him a large circle, instead of crosshairs, indicating the firing pattern of the gyrojet rounds. He centered the three charging Sathar in the circle and fired. A singular large boom resounded and recoiled through Terl's suit as 20 gyrojet rifle rounds shot at once.

The explosive bullets peppered the area of the Sathar troopers. A large cloud of dirt sprang up around the writhing Sathar.

Zerik trained his heavy machine gun on the fallen Sathar and finished them off with controlled bursts.

"Missile lock!", 'Ting exclaimed.

"I'm slaved." Gorb concurred, indicating that he had linked his missile pack to 'Ting's targeting computer.

Terl saw six missiles streak overhead. They lit up a trough of land all the way to their targets. Six flashes in rapid succession bloomed in the distance. Seconds later Terl felt the ground shudder.

One of the tank images on the tactical display stopped moving.

The remaining Sathar had set up some sort of heavy weapon and a defense screen. The Sathar fired. A searing blue light hit Zerik squarely. He stumbled back as his suit armor burned and crackled. The Yazarian cursed.

"One tank still moving!" Gorb yelled.

A fiery arc trailed an object that exploded in the direction of the tank. Schafer had fired his recoilless rifle.

"Locked…." 'Tings comm. went to static as a huge shaft of white light lit up the whole field. It came from the direction of the tank. It was directed at the outcropping above Terl. His visor automatically tinted from the light.

An explosion rocked the ground.

Terl switched to his right forearm gauss rifle. The weapon hummed. A steady stream of short red streaks cracked as they broke the sound barrier.

Terl jumped sideways as another streak, from the Sathar laser team, slammed into the rocks behind him. He crouched on one knee and fired another stream of hyper sonic bullets at them. His rifle overheated and stopped. "Squad, sound off!" Terl yelled.

Zerik came to his senses and started pounding the Sathar team with his MG. "Still here," Zerik snarled.

"Here," Schafer huffed.

"Here! Gorb's down, ammo hit…..exploded." 'Ting sounded shaken.

The Sathar laser team's field collapse as they took multiple hits from the Yazarian. Sparks flew as their energy pack detonated sending the 'slugs' sprawling.

Terl waited. His suit had shut down again, another nuke. His patience got the best of him as he cursed to his suit. "Stuck In a fracken statue. In the middle of a fire fight!" He screamed. He felt the ground roll beneath him.

His suit came back online. It had only been 15 seconds, an eternity when a Sathar tank is bearing down on you.

"Tactical! Locate that tank!" He commanded.

"I got 'em." Schafer reported.

"Get a lock. Zerik slave to Schafer." Terl said.

The tank was much closer, about 400 meters.

Terl skipped for cover. "Keep moving." He recited to himself. First rule of combat. It had been pounded into him at Land Fleet training. It usually worked.

The fusion cannon emitted dazzling white light again. Terl found himself in the air. He landed face down in the dirt. He could feel the heat from the blast through his suit.

"Get up!" he told himself. He got to a crouch and saw missiles streak from Schafer and Zerik.

Two missiles impacted just short of the grav tank. They exploded on the defense screen. The rest made it through. Four explosions rocked the tank. A blazing orb consumed the tank as it exploded. The shockwave sent debris flying. Zerik was already charging the tank and was knocked to the ground.

The whole squad, except for Gorb, cheered over the com.

'Ting turned and fired twin beams of ruby light, from his forearm mounted heavy lasers. Four Slugs had emerged from the burning APC and were cut down by the Vrusk.

They all did a quick scan of the area. No more movement.

Terl checked his team's status on his HUD. They were all privy to the same displays.

Gorb: Heavy damage – in stasis – beacon on.

Schafer: no damage. "Not a scratch. Fricken newbie."

'Ting: light armor damage.

Zerik: armor damage - some structural.

Terl: right leg armor - structural - pilot.

Terl felt a searing pain in his leg just as he read the status. He keyed up the suit's automed and gave himself a Biocort hypo. Terl grit his teeth as the pain deadened.

"Alright, let's move.

Gorb's out. Well have to leave him here and let med corps scrape him up."

Zerik led off again. Everyone fell into position for a four suit squad. They got back up to speed.

"You know the drill. Keep scanning…." Terl reminded his comrades.

"Hey Sarge, you guys do this everyday?" Schafer asked.

"What do you mean?" Terl asked annoyed.

Their fast jog got them within a klik of Destiny Colony. The team could see signs of a fight. Explosions, dazzling laser flashes, and tracers.

"I was just wondering if we're gonna see any real combat?" He chuckled.
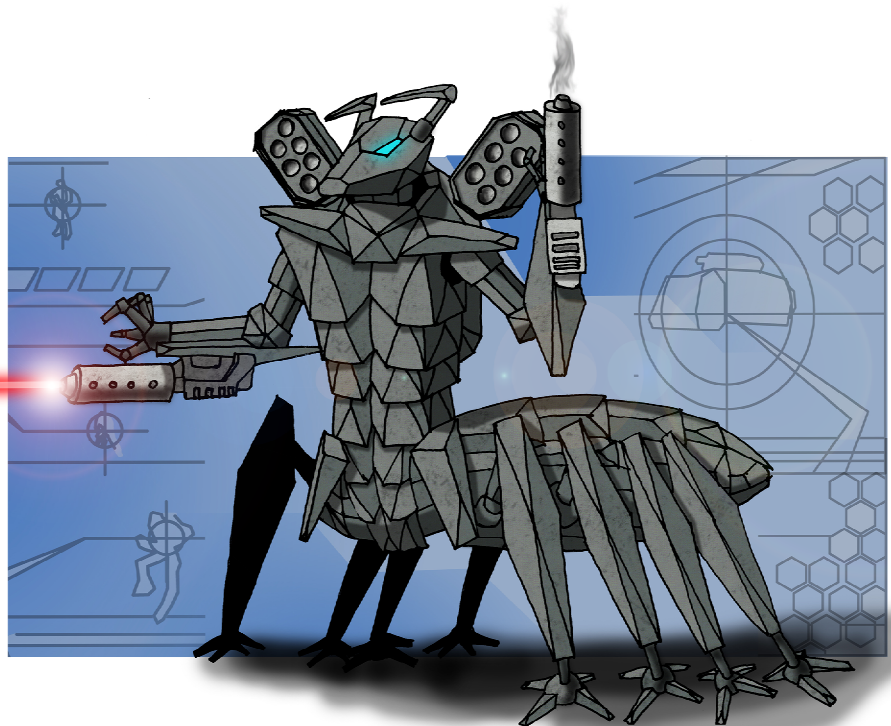
That broke the tension and everyone laughed, Ting clicked.

Terl fought a grin and said; "Sure the next slug tank is all yours."

They all laughed a bit louder.

"All right that's enough. We still have a job to do, and some payback for Gorb!"

They all switched on defense screens and charged Destiny………..

POWERED BATTLE SUITS

By Chris Harper

AUTHORS NOTE:

I have always been fascinated by the arms race between weapons and protection. All through history man has created weapons, then armor as proof against it. Armor has always evolved as a result of weapons and environment. When I contracted the science fiction bug I wondered what type of armor would protect a being from high tech energy weapons as well as the harsh environments encountered.

I would like to show due respect to two great authors that fired my imagination for this sort of thing: Robert A. Heinlein (Starship Troopers) and Joe Haldeman (Forever War). I highly recommend these books. Forget the Starship Troopers movie it is not the same.

Here it is, my version of futuristic powered battle armor. By no means do I claim propriety in any of my ideas. They are simply a collection of ideas I have picked up through historical and fictional books. I have left some of the rules loose and open to interpretation. I think this is in keeping with Star Frontiers tradition. I much prefer a flexible, player driven system.

Play testers: Zackary Harper
                James Whitehead
                Jenny Harper

HISTORY

The ground war during the Second Sathar War didn't go well for the UPF. In 81FY The UPF is victorious on Zebulon, but with heavy losses. The UPF realizes that the Frontier needs better defenses for its ground forces. The Sathar deploy huge hover tanks and artillery. The UPF fleet simply doesn't have anything to compete with this devastating hardware. If the UPF built more tanks, then they would need to build specialized ships to get them planet side. This type of build up could take years and The Second Sathar War was raging.

Wartech's solution was the powered battle suit. Cheaper to build than tanks, more portable, more maneuverable, the battle suit can take massive punishment, and bring to bear many combinations of weapons. The UPF started development of battle suit units.

The battle suits became invaluable to the Land Fleet.

The most significant use of battle suits was in 88-90 FY during the siege of Sathar Outpost #1. The Land Fleet had to slug it out for two years. Two notable battle suit units earned distinction. "Zari's Zamiras" 54th Battle suit, a predominantly Yazarian unit, was known for Rushing Sathar tanks leaping on and pulling them apart. The other was the "Slug Stompers" 23rd Battle suit for fighting their way into the Sathar stronghold and saving many slaves that the Sathar had threatened to kill.

There are now several variations being used in the frontier. Primarily used by the UPF and Megacorps. Powered suits are sometimes modified for scientific exploration in environments that are very hostile such as acidic atmospheres or research conducted close to a star.

These rules represent the original platforms developed. Feel free to modify them as needed.

STATS

	Standard	Vrusk
Size	3m	3m
Mass	500 kg	400kg
Power Type	Type 1 Parabattery	Type 1 Parabattery
Strength	400	300
Stamina	400	300
DEX Modifier	-20	-15
RS Modifier	-20	-15
IM Modifier	-2	-2
Cost	50,000 cr.	55,000 cr.

RACES

Humans and Yazarians can pilot the standard battle suit design. Dralasites can change their shape to fit into a standard suit.

Vrusk have their own battle suits. They are a marvel of articulation. The design capitalizes on acute angles to deflect projectiles. Vrusk battle suits have less stamina and strength because of the need for greater articulation. The Vrusk suit can remain mobile as long as it has at least three opposing legs operating. The Vrusk suits are much faster. They are commonly used for reconnaissance missions. They can get in fast and still pack a punch. Vrusk have armored sheaths that encase their antennae. There are many sensors in the antennae that can enhance their sense of smell and there vibration senses.

CONSTRUCTION

A powered armor suit is an exoskeleton chassis covered with Polyplate armor. Polyplate is a hardened

polymer plate. It is four times as thick as the Polyplate used for body armor. The exoskeleton has motors at the joints like personal exoskeletons. It uses strength amplifier motors that are many times more powerful.

The suit is sealed from the outside environment like a space suit. The suit employs communications, advanced targeting computers, life support, defense screens and medical support. Many combinations of standard and heavy weapons can be mounted to the suits four hard points. Hard points are reinforced connections to mount weapons and hardware.

The suit's power comes from a Type I parabattery on the suit's back. There are three armored compartments on the back of the battlesuit. One is for the parabattery, one is for ammo storage, and one is for cargo.

OPERATION

The suit reacts to the pilot's movements and amplifies them to the maximum strength of the suit. While in the battlesuit a character can wear soft armor such as a Skein or Albedo suit. The pilot's arms and feet do not reach all the way to the end of the suit's arms and legs. The pilot's hands reach controls that are in the arm of the suit. From here he can operate the hands with a waldo glove device. This area also has buttons and switchs to operate the suit systems. There is enough room in the cockpit for the pilot to pull his arm out of the suit arms. This allows him to access the cargo area.

The suit hands cannot use standard size tools or weapons due to their large size.

The pilot's feet rest on shock absorbers. This helps absorb the jarring effect from running and jumping in the mech. The pilot can run, jump, vault, climb and fight much like they would do without the suit. Due to its bulk the pilot has lower dexterity and reaction speed.

The suit has a sophisticated HUD (Heads Up Display). The pilot gets updates on all the suits systems. Such as: battery power, ammo, Structural integrity, atmospheric conditions, active shields, etc. The HUD can also display 3D area and tactical maps.

The suit's helmet and upper torso swivel back to allow the pilot to climb in. The pilot can climb up the suit to get in, or lay the suit down to allow the pilot to crawl in.

SYSTEMS

INCLUDED SYSTEMS

Level 1 Control Computer	Targeting Computer
Advanced Chronocom	Compass and Map Display
Life support system	Infrared sensors
Magnigoggles	Toxy-rad Guage
Defensive screens	Helmet mounted light
Freeze field	6 doses Biocort, 1 dose Staydose

The suit's operations are handled by a class 1 computer.

The targeting computer aids in aiming and tracks enemy positions and movement.

The suit has a built in advanced chronocom (*Frontier Technical Journal - Star Frontiersman issue 8*).

Inside the cockpit the pilot can see out of the armor crystal visor. The visor can be darkened and is not needed to see. There are many fiber optic ports throughout the skin of the suit. This provides the pilot with a holographic view. This view can be rotated to give the pilot 360 degree vision. The pilot can also switch to infrared or magnified views.

There is also a holographic heads up tactical display. It relays information from the targeting computer. It also provides map positions and directions provided a tech has programmed the system for the local area. The pilot can transfer images and information to other suits. He can also guide missiles, mortars or recoilless rifle rounds for other suits.

Battle suits can operate in hostile environments such as toxic or radioactive atmospheres or the vacuum of space. The life support computer maintains all the necessary aspects of preserving the pilot. The suit provided 50 hours of oxygen. The life support system can filter air from outside. The air can be cleaned of any toxic particles. There is shielding against low to medium level radiation. There is a layer of self sealing material under the poly plate armor. (*See KH rules for automatic puncture sealing and emergency patches*.)

The computer also includes a medical system. The battle suit is equipped to administer life preserving or life saving drugs to the pilot. The pilot can manually administer Biocort to himself. There is enough for six injections. If the pilot's stamina reaches 0, the suit will automatically administer Staydose. If the pilot's stamina reaches 0 again; the suit will activate a freeze field and shutdown. It will activate a beacon to a pre-programmed 'home base'. It will remain this way and only operate the freeze field until all the SEUs are used up.

The battle suit has a light mounted on the helmet. (*See AD rules for flashlight.*)

The suit has Albedo, Inertia and Gauss screens installed. Only one can be operated at a time. (*See AD rules for defense screens*) The appropriate SEU are subtracted from the suit power supply. The player must have the screen that is currently operating marked on a character sheet, and can switch screens during their movement phase.

POWER

Battle suits use 10 SEUs per hour to operate. The power is provided by a Type I parabattery. One 500 SEU battery is used for suit systems. If another parabattery or SEU pack is located in the cargo compartment, power can be diverted to run suit

systems. If the suit gets to 0 power it will be completely shut down and be immovable by the pilot.

MOVEMENT

SPECS	Standard	Vrusk
Top Speed (kph)	75	105
(m/turn)	125	175
Cruise speed(kph)	30	48
(m/tur)	50	80
Accel/Deccel(m/turn)	40/30	60/40

A battle suit can reach vehicle speeds while running. These speeds cannot be maintained for long. The pilot is still using muscle power to activate the strength amplifiers. The endurance of the suit is related to the stamina of the pilot.

The pilot can run at top speed for a number of minutes equal to his STA/10. He can maintain cruise speed for a number of minutes equal to his STA/5. The character can walk for his STA/5 in hours.

Vehicle speed movement is handled in the same way as ground vehicle movement. (*See AD vehicles*) All of the same maneuvers that are executed in a ground vehicle can be performed by a battle suit. If the pilot fails a reaction speed check he rolls on the AD vehicle control table. The effects are handled the same with a few exceptions. With a 'roll' result the suit is always considered to be right side up. With a 'roll and burn' result, the burn is ignored. Instead the suit takes damage on the 'Battle suit Damage Table' with 2 dice added to 3d10.

When a pilot falls in a battle suit, the suit receives 1d10 for each 20 meters per turn the suit is traveling.

LEAPING: a pilot can leap in the battle suit. The distance is 1/3 the distance traveled per turn. The player must make a reaction speed check to avoid a roll on the vehicle control table.

JUMPING: The battle suit can jump vertically 5 meters. A battle suit can jump down 10 meters with no effect. Falling from a height uses the AD rules for falling.

Maneuvers in a battle suit are the same as any action a character would make. While in the suit the character can run, jump, climb, grab, kick, and punch. Characters must make a maneuver check with their adjusted DEX. If they fail, the battle suit will fall down, causing 1d10 damage. The player must then roll below his modified DEX to stand up.

Keep in mind that a powered battle suit is not personal armor. It is more akin to a tank. Therefore; suits cannot go everywhere a person can go. Due to its Height, a battle suit will not fit through most doorways. Some floors will not support the weight. Steps can be a problem also. The GM should determine appropriate maneuver check in these situations. The Game master should keep this in mind to appropriately limit the use of battle suits.

MELEE COMBAT

While in the battle suit, the pilot can punch, kick, or wrestle an enemy. The character's melee or martial art skills apply with their modified DEX score. Re-calculate their chance to hit using the modified DEX score.

Due to the suit's immense weight and strength punching and kicking damage is 2d10 +20.

For the alternative Ablative Damage rules (*See Ablative Damage, Star Frontiersman issue 8*), punching and kicking damage is 3d10.

RANGED COMBAT

With the targeting computer the pilot can use his normal projectile or beam weapon skill while in the suit.

Direct fire weapons such as lasers and machine guns can be aimed by using the targeting computer. The aiming rules are the same as the AD rules. The pilot must remain stationary for one turn, except the enemy can be moving and still be aimed at, and receives a +15 bonus.

The targeting computer can be used to guide up to three missiles or mortar grenades a turn. The pilot must remain stationary and aim the missiles for one turn. The missiles can be launched all at one target or multiple targets. If the pilot used one turn to aim all (3) missiles can be launched at a +15.

For indirect fire another character or remote drone can relay information to the pilot to fire the rockets, grenade mortars or recoilless rifle unseen. If a scout is being used the pilot must aim for two turns.

WEAPONS

Small arms or large weapons can mounted on the battle suit. The suits have 4 hard points to mount weapons: one on each shoulder and one on each forearm. The weapon's cost is 20% more for the modifications required to mount on the suit. The weapons do their normal damage.

Virtually any weapon can be mounted to the battle suit. Heavy weapons such as Recoilless rifles, Grenade packs, "Stinger" Gyrojet packs, Mortar packs, and Guided missile packs must be mounted on the shoulder mounts. (*For descriptions of the weapon packs see the Heavy Weapons section below*)

When a weapon is used that requires extra ammo storage, such as a machine gun, ammo and a feed mechanism must be allocated in the ammo storage compartment.

HEAVY WEAPONS
AUTO RECOILLESS RIFLE

The Auto RR will automatically load a new round. Up to 20 rounds can be allocated in the ammo storage compartment. The ARR must be reloaded by a tech.

HEAVY WEAPON STATS

Weapon	Cost (cr)	Weight	Damage	Ammo	Rate of Fire	Defense	Range
Automatic Recoilless Rifle	4,800	30 kg	12d10	--	1/turn	inertia	-/150m/1km/2km/3km
Machine Gun	2,800	20 kg	10d10	--	1 burst/turn	inertia	-/70m/200m/500m/1km
MG Autoloader/Belt	--	5 kg	--	holds 600 rounds	--	--	--
Guided Missile Pack	10,000	30 kg	15d10	4-6	1-3/turn	inertia	-/70m/200m/500m/1km
Mortar Pack	4,000	30 kg	as grenade	4-6	1-3/turn	per grenade	-/200m/500m/1km/2km
"Stinger" Gyrojet Pack	3,000	20 kg	3d10	80	5-20/turn	inertia	-/5m/50m/100m/150m

MACHINE GUN

The machine gun bullets are in a special pack mounted on the back of the battle suit. Up to 600 rounds can be stored in ammo storage. The bullets are fed to the machine gun through an armored belt. The pack must be reloaded by a tech. Uses any one hard point for mounting.

GUIDED MISSILE PACK

The guided missile pack has 4-6 launch tubes and must be reloaded by a tech. Uses one shoulder hard point for mounting.

MORTAR PACK

The mortar pack has 4-6 launch tubes and must be reloaded by a tech. Uses one shoulder hard point for mounting.

"STINGER" GYROJET PACK

Requires one shoulder hard point for mounting. The Stinger pack is similar to the missile and mortar packs except it has 80 barrels that each hold a single gyro jet rifle round. This weapon was developed for anti-personnel use, to cover a large area. It is not as accurate as a burst from an automatic weapon

The pilot can fire 5-20 bullets in a single blast each round. The shots can be fired at enemies within an area 10 meters wide. If a hit is successful; the player rolls to see how many bullets hit the target. A dice roll of 1-2d10 is rolled and divided by the number of targets. This is rolled for each target or until all the rounds are used up. If using only 5 Rounds are being fired a 1d10 is still used. With a maximum of 5 hits divided among the targets. If dividing the roll by the number of targets reduces it below one, the target being rolled for is missed.

EXAMPLE

Terl fires 20 rounds from his 'Stinger' pack at a group 3 of Sathar. He hits. So, he rolls 2d10 / 3 for each Sathar.

Sathar #1: roll 1 + 5 = 6/3 Therefore he is hit by 2 rounds --- 6d10 damage

Sathar #2: roll 6 + 3 = 9/3 Therefore he is hit by 3 rounds --- 9d10 damage

Sathar #3: roll 9 + 3 = 12/3 Therefore he is hit by 4 rounds --- 12d10 damage

Ablative Damage optional rule: Hit locations for each bullet must be rolled separately. The location can be bumped per the Ablative damage aiming rules.

AMMO

Once weapons are allocated, the player must allocate ammo for the weapons. Ammo includes conventional ammunition, such as bullets, and SEU power. Ammo is fed on the outside of the suit by a power cable, lasers, or by an armored ammo belt.

There is a compartment that can hold up to a Type 1 parabattery @ 25kg. This would work if the suit deployed only beam weapons. For projectile weapons the player must add bullets to the ammo compartment. Each clip weighs .5kg and a machine gun belt weighs 4kg.

When using projectile ammo, 10kg out of the compartment's 25kg storage capacity is used for the ammo feed mechanism and an armored ammo belt. The other 15 kg can go toward ammo storage. So, for a machine gun @ 200 rounds per 4kg, the player can fit 600 rounds of ammo. To mount an automatic rifle: 10 kg for feed mechanism, 15 Kg left over, Then rifle bullet clips @ .5kg for 20 rounds. So, the ammo storage can fit 400 rounds. If that is too much ammo, you can carry 200 rounds with 10kg left over. Enough room to carry one power backpack (100 SEU) as backup power. If you have a weapon on each forearm mount that requires ammo. You must spend 15kg for the feed mechanism and an extra ammo belt.

Once the configuration is determined it requires a level 3 tech to modify the ammo storage again.

CARGO

There is a cargo area on the back of battle suit that can hold up to 25kg. It is airtight and safe in the vacuum of space. It is meant to hold the pilot's personal items. There is a hatch on the outside and the pilot can access the compartment from the inside of the suit, through a smaller hatch. Both the hatches will not open at the same time. The cargo compartment cannot be used for active ammo or SEU storage.

DAMAGE

The battle suit takes damage normally per AD rules. The damage is first taken off of the armor stamina points. After the 400 armor points (300 for the Vrusk model) are gone the suit takes internal damage and the pilot takes damage. On a roll of 01-02, the suit takes additional damage on the battle suit damage table regardless of how much armor stamina it has. Weapons that only do 1d10 damage will not affect the suit in a combat situation.

Ablative Damage Optional Rule: If you are using the ablative damage rules the suit has 40 armor stamina (30 for Vrusk and 15 for each leg) points at each location.

CRITICAL DAMAGE

Once the armor has been penetrated the, suit receives critical damage on the 'Battlesuit Damage Table'. The pilot also receives damage. Hits are cumulative. The suit structure can be hit up to 6 times before the suit is immobile.

Ablative Damage Optional Rule: The structure can be hit up to three times in each limb location before it is rendered inoperable. The table works similar to the AD 'Vehicle Damage Table'. The number of dice damage + 3d10 yields a result on the table.

EXAMPLE:

Terl's battle suit armor is down to 20 points. He gets hit with 6d10 damage.

A 10, 9, 4, 3, 2, 2 are rolled. The highest numbers are added up first. The 10, 9, and 4 are enough to penetrate the armor. Whereas, the 3, 2, and 2 are left. Therefore, 3 dice penetrate. The attacker gets 3+3D10 on the battle suit damage table.

She rolls a 10, 5, 3 + the dice makes 21. So, the torso structure is hit.

Ablative Damage Optional Rule: Terl has two boxes of armor left on his right arm. The 10, 9 destroy the two boxes. The 4,3,2,2 penetrate the armor. They do not do damage to the pilot, but are used as dice to add to the Battle Suit Damage Table. (4 dice + 3d10)

ADVENTURE IDEAS

- The Team gets dropped near a suspected Sathar base to do a little recon.
- There is a colony uprising. The civilians are playing rough. Not enough police to go around, they do have some old Battle suits lying around. Don't hurt the civis'.
- A derelict Sathar hulk floating in the blackness needs to be investigated. It might self destruct. It might be a Sathar ambush.
- Some Pirates have some hostages and some serious hardware. The team is sent deal with it.
- A planet with a corrosive atmosphere needs to be explored for some valuable minerals.
- The team must get to their ship, there is an army of bad guys in the way.
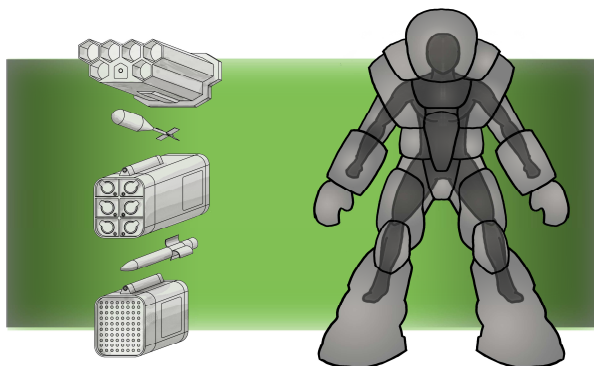
BATTLE SUIT DAMAGE TABLE

Dice Roll = (dice penetrated + 3d10)

Die Roll	Effect
2-19	no effect
20	roll on suit systems table
21	torso structure, cargo area damaged
22	arm structure damaged
23	leg structure damaged
24	weapon damage
25	arm structure damaged
26	leg structure damaged
27	arm amplifier motor damaged
28	leg amplifier motor damaged
29	parabattery damaged
30+	ammo, parabattery damaged

EXPLANATION OF RESULTS:

Suit systems: a 1d10 is rolled on the Systems damage table

Weapon: A weapon is destroyed. Roll randomly.

Torso structure: The suit's chassis is damaged. -20 m/turn for movement. All actions at -10, There is a 20% chance that the cargo area is damaged. Choose item or items to be destroyed. If in space: contents jettisoned. Suit interior not affected.

Arm structure: The suit exoskeleton is damaged. All actions using the arm including aiming at a -20.

Leg structure: The suit exoskeleton is damaged. All movement is at -20 m/turn. All actions involving legs are at -20

Amplifier motor arm: The motor that powers the arm is destroyed. Arm cannot move. Weapon is at a -40 to aim.

Parabattery: One of the parabatteries is destroyed. All SEUs lost.

Ammo/Parabattery: The ammo for a random weapon is hit and explodes. The remaining rounds do their normal damage to the suit's stamina. If the suit uses only beam weapons or there is no ammo left the parabattery explodes and does 1d10 per SEU remaining to the suit's stamina. (*Ablative Damage Optional Rule: damage is divided evenly between the chest head and 1 arm location on the appropriate side.*)

SYSTEMS DAMAGE TABLE

Die roll (d10)	System affected
1	Medical
2	Targeting
3	Chronocom
4	Compass / map display
5	Life support
6	Vision
7	Toxy-rad
8	Defense screens
9	Light
10	Freeze field

EXPLANATION OF RESULTS

Medical: The medical system no longer functions.

Targeting: The targeting system is destroyed. -20 to all attacks. Cannot use guided missile lock on. Can only fire 1 missile at a time.

Chronocom: Chronocom is destroyed.

Compass / map display: destroyed. Will not function

Life support: The air supply and air filter, heating and cooling cease to function. After 1d10 minutes the character will start to take 1d10 points of damage a turn.

Toxy-rad: The toxy-rad gauge is destroys. The suit will no longer display a toxy-rad report.

Defense screens: All defense screens are destroyed and will no longer function.

Light: the suits external light is destroyed.

Freeze field: The Freeze field is destroyed.

POWERED BATTLE SUIT

PILOT _____

SUIT STR / STA 400

SUIT DEXTERITY
(Pilot Dex -20)

SUIT R S
(Pilot RS -20)

INITIATIVE MODIFIER + _____
(Suit Dex / 10)

PUNCH SCORE 2D10 + 20

RANGED WEAPONS _____ %

MELEE WEAPONS _____ %

TOP SPEED	Kph 75	m/turn 125
CRUISE SPEED	Kph 60	m/turn 50
ACC. / DEC.	40 / 30	

SUIT SYSTEMS:

- [ ] medical
  biocort ☐☐☐☐☐☐ doses
  staydose ☐☐☐☐☐☐
- [ ] targeting
- [ ] chronocom
- [ ] compass / map display
- [ ] life support
- [ ] hours of air

  vision:
- [ ] infrared
- [ ] magnivision
- [ ] toxyrad
- [ ] defense screens
- [ ] light
- [ ] freeze field
- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____
- [ ] _____

CARGO (25 kg max.)

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

WEAPON ☐   **0: HEAD**   WEAPON ☐

1: CHEST   **2: CHEST**

TORSO STRUCTURE

4: R. ARM   **6: L. ARM**
☐☐ STRUCTURE   ☐☐ STRUCTURE
☐ AMPLIFIER   ☐ AMPLIFIER
☐ WEAPON   ☐ WEAPON

3: ABDOMEN

5: R. HAND   **7: L. HAND**

8: R. LEG   **9: L. LEG**
☐☐ STRUCTURE   ☐☐ STRUCTURE
☐ AMPLIFIER   ☐ AMPLIFIER

DEFENSE SCREENS

ACTIVE
- [ ] ALBEDO
- [ ] GAUSS
- [ ] INERTIA

HOURS OPERATED:
(10 SEUs per hour)

POWER PARABATTERY

WEAPONS AND AMMO
(25 kg max.)

RIGHT SHOULDER: _____ ☐

AMMO: _____

LEFT SHOULDER: _____ ☐

AMMO: _____

RIGHT ARM: _____ ☐

AMMO: _____

LEFT ARM: _____ ☐

AMMO: _____

VRUSK POWERED BATTLE SUIT

PILOT _____

SUIT STR / STA `300`

SUIT DEXTERITY
(Pilot Dex -20)

SUIT R S
(Pilot RS -20)

INITIATIVE MODIFIER + _____
(Suit Dex / 10)

PUNCH SCORE   2D10 + 15

RANGED WEAPONS _____ %

MELEE WEAPONS _____ %

	Kph	m/turn
TOP SPEED	100	175
CRUISE SPEED	60	50
ACC. / DEC.	60 / 40	

SUIT SYSTEMS:

- ☐ medical
  biocort ☐☐☐☐☐☐ doses
  staydose ☐☐☐☐☐☐ doses
- ☐ targeting
- ☐ chronocom
- ☐ compass / map display
- ☐ life support
- ☐ hours of air

vision:
- ☐ infrared
- ☐ magnivision
- ☐ toxyrad
- ☐ defense screens
- ☐ light
- ☐ freeze field
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

CARGO   (25 kg max.)

_____
_____
_____
_____
_____
_____
_____
_____

0: HEAD

WEAPON ☐   WEAPON ☐

1: CHEST   2: CHEST

5: R. HAND   **7: L. HAND**

4: R. ARM   **6: L. ARM**

STRUCTURE   ☐ STRUCTURE
☐ AMPLIFIER   ☐ AMPLIFIER
☐ WEAPON   ☐ WEAPON

TORSO
STRUCTURE

3: ABDOMEN

STRUCTURE   STRUCTURE
AMPLIFIER   AMPLIFIER

8: R. FRONT LEG   **9: L. FRONT LEG**

STRUCTURE   STRUCTURE
AMPLIFIER   AMPLIFIER

R. LEG 2   **L. LEG 2**

STRUCTURE   STRUCTURE
AMPLIFIER   AMPLIFIER

R. LEG 3   **L. LEG 3**

STRUCTURE   STRUCTURE
AMPLIFIER   AMPLIFIER

R. LEG 4   **L. LEG 4**

DEFENSE SCREENS ACTIVE
- ☐ ALBEDO
- ☐ GAUSS
- ☐ INERTIA

HOURS OPERATED:
(10 SEUs per hour)

POWER PARABATTERY

WEAPONS AND AMMO
(25 kg max.)

RIGHT SHOULDER: _____ ☐

AMMO: _____

LEFT SHOULDER: _____ ☐

AMMO: _____

RIGHT ARM: _____ ☐

AMMO: _____

LEFT ARM: _____ ☐

AMMO: _____

IT'LL RIDE UP WITH WEAR

By William Signs

ADDITIONAL SUITS FOR STAR FRONTIERS

> **Editor's Note**: Body armor seems to be popular this month. Here's another article adding even more options.

SHIPSUIT

Spacers wear this suit as a standard uniform. It consists of a layer of shock-absorbent gel between two layers of skeinweave integrated into a lightweight exoskeleton (half the weight of a standard exoskeleton).

Both the gel layer and the exoskeleton compensate for the effects of high-gee acceleration, allowing for normal manual dexterity and movement under thrust while helping to negate the adverse effects of acceleration.

The layers of skeinweave protect as a military skeinsuit, protecting from physical damage, while the built-in exoskeleton provides no additional benefit other than allowing normal movement under thrust.

In the event of decompression, an inflatable hood of clear skeinweave can be pulled up from the back of the suit collar, over the head and back down to the front and sides of the collar, where it can be zipped securely into place. A tank of compressed air at the rear of the suit provides up to ten hours of breathable oxygen.

The suit also has a 50 SEU beltpack and uses 1 SEU/turn of operation.

The shipsuit costs Cr 1,500 and weighs 3.5 kilograms.

POWERED SKEINSUIT

A powered skeinsuit is a suit of powered armor used by soldiers on the battlefield. It consists of a military skeinsuit, a full-scale exoskeleton, an albedo screen, a helmet with a built-in chronocom, a tank of compressed air good for 10 hours of breathable air, a Level 3(28 function point) computer, and a type 4 parabattery to power all of the suit's systems plus a beam weapon (usually a laser rifle or a heavy laser, the selected weapon being set at 20 SEU).

The powered skeinsuit also has the strength for the user to carry up to four heavy projectile weapons— usually shoulder-mounted rocket launchers—for fire-support roles.

The powered skeinsuit protects fully against up to 50 points of ballistic/melee damage, plus the defense provided by the albedo screen.

The powered skeinsuit costs Cr 8,300, masses 250 kilograms with the exoskeleton powered down, and has no weight when the exoskeleton is powered up.

ARTICULATED COMBAT VEHICLE

The Articulated Combat Vehicle, or ARCV, is a manned warbot used by both sides, when heavier firepower is called for.

ARCVs are more favored by space-mobile forces than hovertanks, because they are more easily and rapidly deployed than hovertanks.

Standing three meters tall, each ARCV gives a single crewmember the firepower of a hovertank, with the ability to cover a wider range of terrain than would be possible for a hover vehicle.

Three general types of ARCV are listed below.

M-11B

With a Level 5 warbot body resembling a John Deere combine on legs, the M-11B, aka the "gimpie," is a workhorse ARCV, armed with a pair of chin-mounted laser cannon(each doing 40D10 damage or 2D10 Hull Point damage), a pair of side-mounted laser batteries (each doing 20D10 damage or 1D10 Hull Point damage), and a single rocket battery mounted in a swivel directly between the legs (doing 40D10 damage or 2D10 Hull Point damage, and leading to more than a few off-color jokes amongst troops).

It has inertia and albedo screens for defense, and the warbot body itself has 500 Stamina points.

The gimpie lacks an upper pair of limbs, having only the lower pair of limbs, allowing them a land movement of 120 meters/turn.

The lower limbs move with a noticeable stilted gait due to a never-corrected design flaw, giving rise to the nickname gimpie.

This flaw requires a Reaction Speed check every turn, failed checks leading to a crash, as per the AD rules.

The pilot enters the gimpie through a chain-link ladder extending from just above the ground to a hatch in the back of the vehicle leading to the glassed-in cockpit well forward of the legs.

The M-11B costs Cr 500,000 and masses 20 tons fully loaded. It is powered by a pair of Type 4 parabatteries.

M–24 "FIRE ANGEL"

Vaguely anthropomorhic in appearance, the 3.5-meter tall M-24 Fire Angel has a reinforced Level 5 warbot body (1,000 Stamina points instead of 500) and is equipped with both limbs for land movement, plus wings and plasma jets for hover movement.

Its single occupant controls a pair of linked laser cannon in each of the upper pair of limbs, two laser batteries on each shoulder, four rocket batteries in the chest area, and a giant forceaxe (20D10 damage) in the pincer of the left arm.

For defense, the Fire Angel mounts albedo, inertia and gauss screens.

The pilot enters the Fire Angel through a ladder leading to a hatch where the head would be on an anthropomorhic bot, climbing down into a cockpit located in the center of the chest, the pilot receiving all data through cameras mounted throughout the Fire Angel's body.

The Fire Angel cost Cr 1,500,000 and masses 60 tons fully-loaded. It is powered by a hydrogen-fuelled Type 1 power generator.

M–38 SPIDER TANK

The M-38 Spider Tank is an eight-legged Level 5 warbot body (with 500 Stamina points) with a hydrogen-fuelled Type 2 power generator, a cockpit and a remotely-controlled turret housing a pair of linked laser cannon and four rocket batteries at the center of the eight legs.

For defense, the Spider Tank has albedo, inertia, and gauss screens.

The crew of two (driver and gunner) enters the cockpit through a hatch at the bottom of the vehicle, with cameras mounted throughout the ARCV giving the crew a 360 degree field of vision outside the cockpit.

Its eight limbs allow it a maximum movement of 160 meters per turn over most terrain which would otherwise be impassible to ground and hover vehicles.

The Spider Tank costs Cr 1,000,000 and masses 30 tons fully loaded.

> **Editor's Note:** The Flak Armor was not originally part of this article but was added from the Ultimate Equipment Guide on starfrontiers.us.
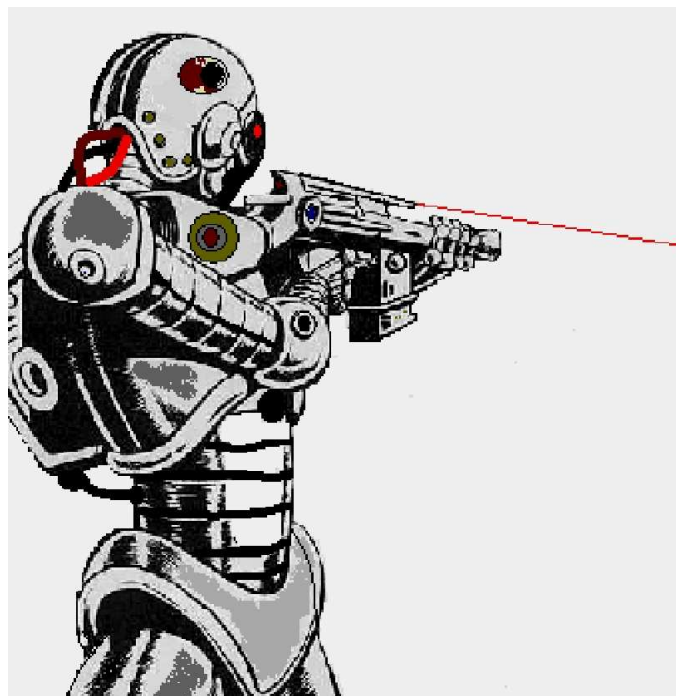
FLAK ARMOR

Hardened plasti-steel armored pieces that are more effective against projectiles and explosives than a skeinsuit. Absorbs 3/4 damage instead of half damage, 10 hit capacity before needing replacement.

Reflective albedoline coating at +500Cr, acts as albedo suit against lasers and absorbs same as albedo suit, and may be re-layered as needed.

750Cr, 2kg mass

STREEL-HYONDOW LR900V RIDE REPORT

By Shadow Shack

## HOVER-RIDER HOLOZINE, DEKA ISSUE
DOS RMAS, PORT LOREN DESK

Having sampled numerous types of hovercycles found in the Frontier, ranging from simple entry-level models to full blown one-off customs, I found myself somewhat intrigued by Streel's latest entry in the sport/standard market. The Hyondow LR-900V called out to me visually, and much to my amazement the good folks at Streel were kind enough to include the vruskan operator package on this sample unit. Many die-hard riders wouldn't give the bike a second look, as its dated styling cues suggest an earlier time period with its boxy tank and sharp angled fairing. Call me eccentric, but I can't get enough of the classics from yesteryear so when I saw this candy crimson coated beast staring back at me with current updated technology, I wanted to make every attempt at a rabid yazirian's drool but alas my insectoid anatomy does not allow for such emotional display. It didn't help that the bike was parked in a service lot on the Port Loren Starport Expressway's offramp leading to Pure Lake, whose snaking roads promise a challenge to any hard-core sport riding enthusiast.

The cycle sits on a trio of Dyna-Electric hoverfans, the front being a 120/80 x 500mm unit while twin 160/80 x 400mm fans occupied the rear, fans that are only slightly larger than the original bikes utilized from back in the day. Even the collapsing front drive shaft connects at the undercarriage along with mechanical pivot cables, reminiscent of the pre-UPF era hoverbikes. But this is where the "weapons of the ancients" end, the rest of the bike is dripping with cutting edge technology. The dual perimeter/cradle frame is made of a titanium alloy, using the motors as a stressed member at the rear. The motor mounted swingarm boasts a hydraulic pitch system reminiscent of any super-sport machine, and being motor mounted the swingarm response is highly improved. The fan reversing tranny selector was lifted from Streel's uber-stopping XR600 CrossBow model, while the gyrostabilizers are quite

similar to the Yamihai RZ900 design. All of that adds up to something that I just knew would be no slouch at canyon carving.

After throwing four legs over the gel saddle, I found the upright stance quite inviting. My abdomen rested neatly under the flip-up pillion, and the eight footpegs were nicely spaced. The handlebar grips were situated perfectly for my arms, I felt as if Streel must have taken my measurements in order to create this bike specifically for me! Donning my FT approved Roketier full face helmet, I ran the slide key and thumbed the starter on the right grip. The trio of hoverfans erupted in a low pitched roar, building steadily into a scraak-like shrieking whine. The six electric motors revved smoothly, and while I couldn't hear them over the roaring fans I presume they are quite silent. I engaged the clutch lever and tapped the shifter down into first gear, the entire motion was fluid and offered no resistance. I lightly rolled the pitch control on the left and eased the clutch out, and the bike lifted up off the ground to its 30cm cushion height. Tapping the throttle on the right ever so gently, the bike idled forward as I kept throttle to a minimum.

Looking over my shoulder I found a clearing in traffic, and I whacked the throttle open. The LR900 shot forward like a recoilless rifle round as I watched the tachometer climb to 20,000RPM, and I knocked the shifter up into second as the speedometer read 60kph. Second gear got me up to 100kph, third netted 135, fourth hit 160, and fifth wound out to the claimed 180kph top speed for a standard road. Streel claims well over 200kph on a super slab, I found myself

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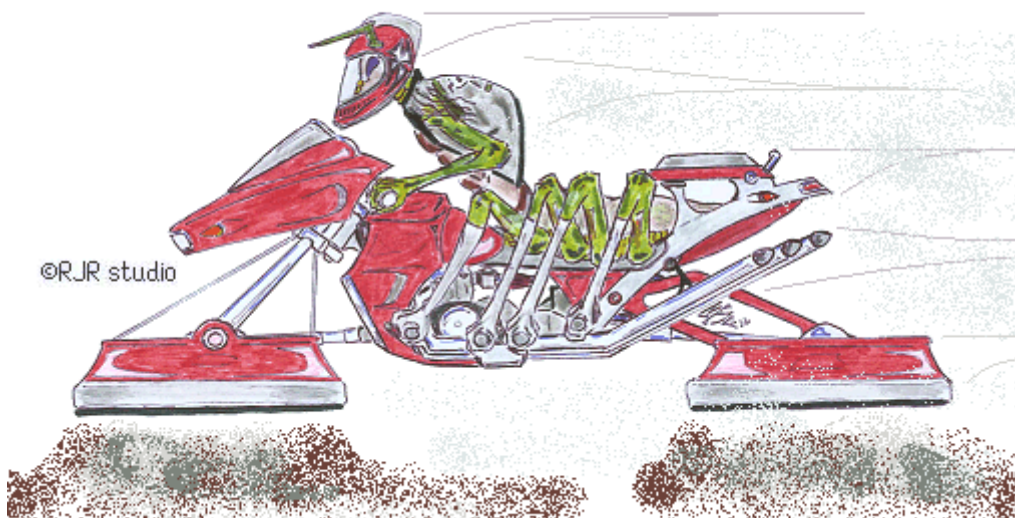
Getting up to speed is a thoughtless process on the LR900V

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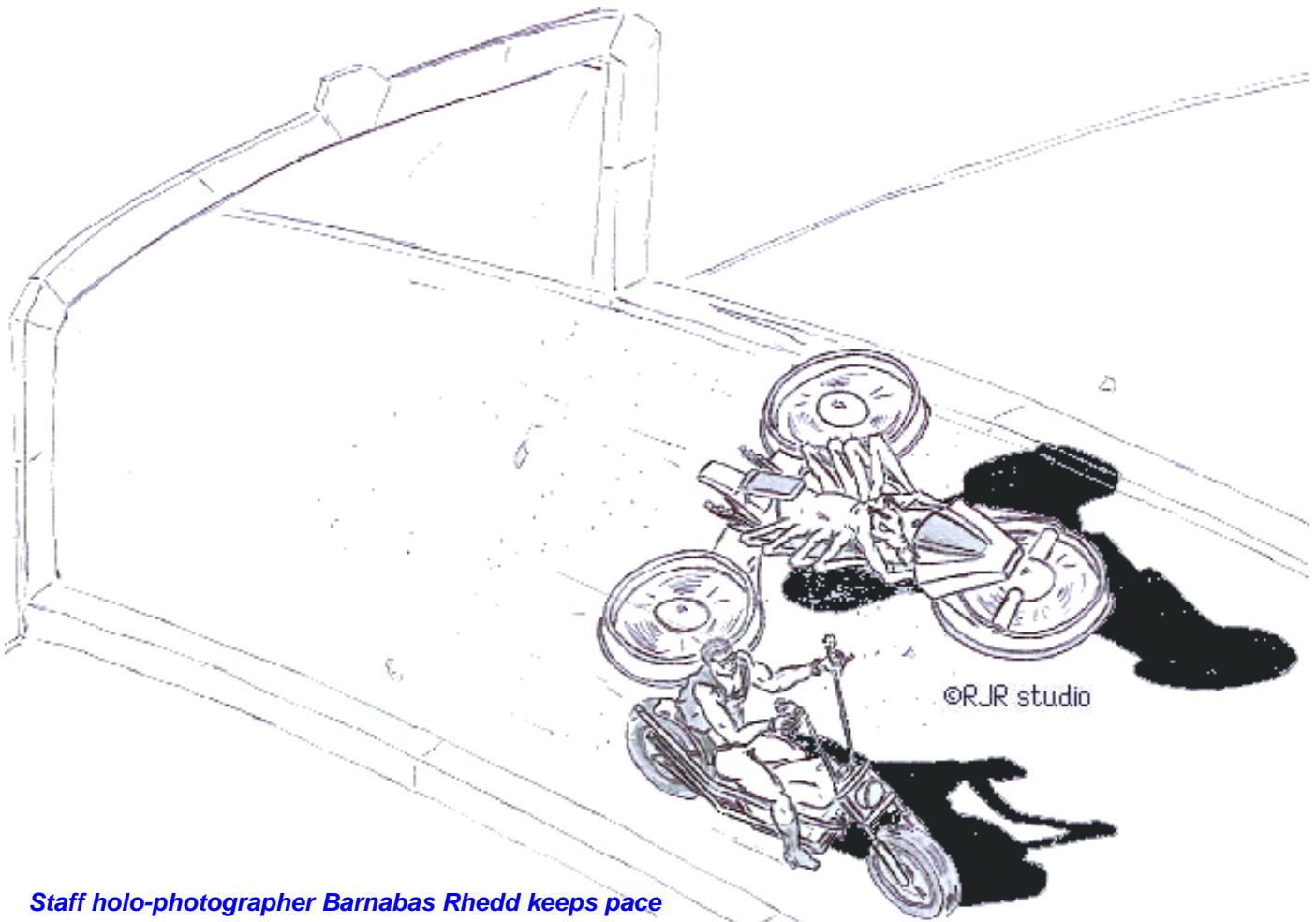
Staff holo-photographer Barnabas Rhedd keeps pace

wishing for an empty stretch of StarPort Expressway to verify this claim but that would have to wait.

I still had a few kilometers to go before the canyon carving curves of Pure Lake, so I let the throttle off until the bike found its cozy cruise speed at 100kph. The sextet of electric motors were very content at cruising speeds, and even the fans subsided enough that I might actually hear another vehicle nearby. The tach read 8,000RPM, and top gear response was stunning. The motors provided a decent torque curve, I could accelerate briskly without sorting through the gearbox. But for an adrenaline rush, dropping down a gear or two was simply exhilarating. The concealed freon cooling system in the lower fairing kept the heat off my legs, and the efficient air cooling tubes shed any motor heat aft of my position. I can't comment on how a passenger might feel as the pillion sets rather close to those exhaust vents, but I didn't feel a thing.

With less than a kilometer of straight road remaining, I decided to try out the brakes before hitting the curves. From the 100kph cruising speed, I pulled a hard stop while timing my chronocom display. Grabbing the brake lever and stabbing the foot pedal simultaneously, all three fans pitched forward and I had to stiffen my forearms to prevent a trip over the nose. My peripheral vision caught a hydraulic array of fairing panels popping out, the assisting air brakes provided enough drag to help the braking fans. It almost felt as if the tail

end was rising during the maneuver, but when I came to a stop the bike was sitting straight and level, still hovering at 30cm off the ground. The mighty LR takes off and stops on a dime, so now it was time to see how it fared in the canyons.

Being on the larger end of the hovercycle spectrum, I wasn't exactly expecting Buckerton Motor Works or Danati-like handling, but the big LR handled exceedingly well despite its sheer bulk. The factory manual suggests keeping the speedometer under 55kph for safe handling, but I was comfortably hitting 65kph without getting my heart rate up. The fun really began as I tried a few 100-klicker turns, the rear fans were straining and at the same time threatening to grab a handful of terra firma during such shenanigans.

Some of the tighter hairpins and switchbacks required a little additional force. Still, the response from the vintage leading mechanical fan adjustment system never gave up or showed any sign of fatigue during the endless kilometers of winding Pure Lake roads. In short the bike simply felt at home cruising and carving in any environment. After a few hours of heart racing curve duty, I pointed the nose back toward town. Hitting the StarPort Expressway, I never found enough of an opening in the heavy traffic to really open the LR900 up. Curse the mid-day transport traffic. I was really hoping to see just how far she would take me.

After a few kilometers worth of land barge dodging, I found myself turning into the core of Port Loren. I eased the LR toward the main square so I could test her nimbleness in heavy slow going traffic. No disappointment there either, the mighty 900 negotiated every pass with ease thanks to a user friendly powerband. I even found it effortless getting through a pack of urban professional elitists puttering on their high dollar Pan Galactixon models, holding up traffic with their inability to master the basics of riding a hovercycle. Each one snubbed me as I whipped by, yet I was able to maintain a steady 60kph with minimal braking as I snaked my way through the held up traffic. After a few laps around the main square, I peeled away to run around the Stellar Tower Hotel where I caught a look of approval from a pair of hot young vruskettes. Frag, why didn't I think to bring along a spare helmet?!? At the very least I could have tested my theory of those upswept cooling vents. I nearly tagged a stopped skimmer during the process, thankfully my attention span returned in time to utilize the powerful braking system. Yep, those hotties must have been impressed.

I finally made my way back to the Expressway offramp parking lot to regrettably turn this sweet sled back in. The Streel executives loaded it back onto a hover transport, and I waved good-bye. I returned to my old pf:-10 Pan Galactixon RAY-head bobber and took the casual ride back home, reflecting on my experience. I saw that pack of urbanites heading out of town on the way in, and extended a wave that wasn't returned. The LR may not be the most stylish machine out there, but if you can get past the timely looks department you'll find it to be every rider's bike, it does all things very well. At least it's every rider's bike who knows a little something about riding.

Keep that tin in the wind and your knees in the breeze.

SHOTGUNS

Shotguns are high tech versions of modern shotguns. They can fire either buckshot or sabot slugs, or the much sought after explosive sabot slugs. All shotguns require one round to reload, and with exception to the self loaders may fire once per round until out of shot shells. Double barreled shotguns may fire each barrel separately (once per round) or both simultaneously. Semi auto and full auto shotguns fire 2/4 per round respectively, and each additional shot suffers a -5 to hit penalty consecutively until the gun is steadied, meaning the first shot is determined normally, second at -5, third at -10, etc until the shooter stops to reacquire aim.

SHOTGUN AMMO

Buckshot allows a +20 modifier to hit at point blank range, +10 at short, +5 at medium range, and no modifier for long range or sabot slugs.

The shotguns are listed by name, followed by rate of fire, ammo supply, range (PB/S/M/L/X), cost, and mass (in kg).

Projectile weapons skill required. Damage is 3d10 for buckshot, 4d10 for sabot slugs, and 6d10 for EXP sabot slugs. Cost is 1/2/5Cr for each respectively.
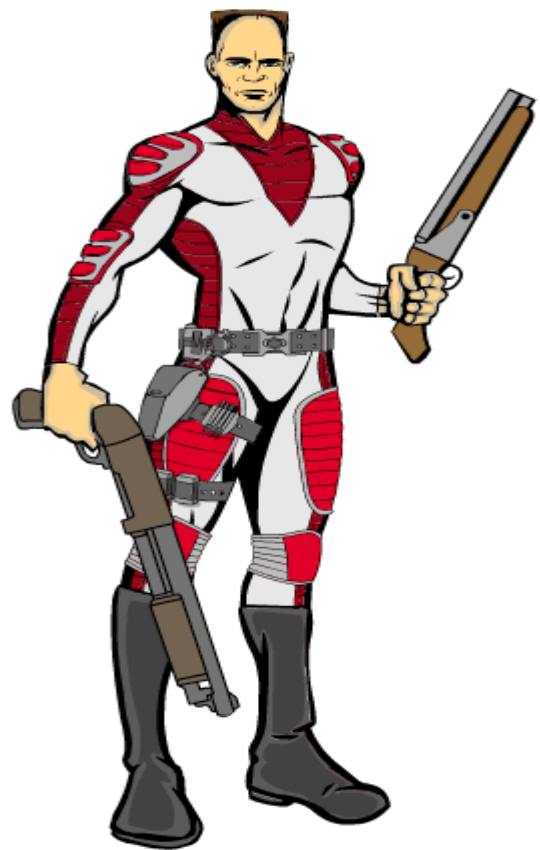
TYPES OF SHOTGUNS

Single Barrel (break away): 1 | 1 | 5/10/50/90/-- | 100Cr|1|

Single Barrel, sawed-off: 1 | 1 | 2/5/10/20/-- |100Cr|1

Double Barrel (side by side or over/under; break-away): 1 | 2 | 5/10/50/90/-- | 150Cr | 1

Double Barrel, sawed off: 1 | 2 | 2/5/10/20/-- | 150Cr|1|

Pump-action Shotgun: 1 | 5 | 6/12/60/100/-- | 200Cr |1|

TAC Pump-action Shotgun: 1 | 5 | 5/10/40/80/-- | 200Cr|1|

Combat Shotgun (semi-automatic, magazine): 2| 8,12, & 20R magazines | 5/10/50/90/-- | 300Cr |2|

War-Monger Shotgun (automatic, magazine or belt-fed):
3 | 12 & 20R magazines, belt feed mechanism | 10/20/50/100/-- | 500Cr | 4

THE JUMP TUG

By Tom Stephens

Ever wonder how all those star systems that don't have a Starship Construction Center get their system ships? If they can't make them and the ships are not Jump capable, how did they get there? The answer: the Jump Tug. This vessel consists of little more than a small crew module, some massive engines and a long boom used to attach the ships it transports. Unloaded, it is one of the fastest ships in the Frontier (especially the smaller model). With crews of three to six beings, these ships traverse the space lanes moving other ships throughout the Frontier.

CHARACTERISTICS

Jump tugs are based on a size 5 hull. Any smaller and the hull can't support the stresses. While they could be larger, you are decreasing towing capacity and increasing cost for no real benefit. Despite their relatively large size on paper, the hulls of these ships are in truth physically small as most of the hull material has been used in reinforcing the engine struts to handle the massive engines mounted on these small hulls and to create the boom, which is 350m long. Although their small hull size would normally use Class B engines, Jump Tugs sport 4 Class C Atomic engines. The relatively small hull size combined with the large engines give the Jump Tug some unique characteristics that make it ideally suited for the role of interstellar ship transport.

Sporting the Class C Atomic Engines, the Jump Tug only needs an overhaul once every twelve jumps through the Void. This means that a Jump Tug is able to make at least one round trip from any SSC to any system in the Frontier without an overhaul.

Because of the over-sized engines on the small hulls, these ships are able to move a large number of other ships all at once. The Jump Tug can ferry ships up to a total combined hull size of between 25. To put that into perspective, it would only take 4 Jump Tugs to move any one of the UPF Task Forces (Cassidine, Prenglar or Nova) between systems. (5 to take Prenglar if you took the Minelayers)

The large engines also mean that, unloaded, these ship are fast. Unloaded, they have ADF and MR values of 6^1. In fact, it's not uncommon for Jump Tug captains to hold impromptu "drag races" on off days for bragging rights on who has the fastest ship around.

Of course having these large engines mounted on these small hulls comes at a price. The hulls have to be incredibly reinforced to withstand the large stresses placed on the ship. This extra reinforcement uses up most of the available hull material leaving little to be used for actual crew space. As a result, the crew area is smaller than an entire hull size of two vessels! On the plus side, because of the reinforced hull, these ships are sturdier than their traditional counterparts and have more hull points.

CREW

Because of the limited space available for the crew, Jump Tug crews are small, typically three to four beings and never more than six. At a minimum the crew needs a pilot, an astrogator and an engineer. Many times the crew will include a second astrogator to speed up jump calculations. Crews, especially on independently owned tugs, may have a few extra engineers in the crew to speed up the overhauls when they are needed. (It can be a drag to overhaul four Class C Atomics all by you.) While crews are typically in the three to six range, there are tugs out there that are run by a single, albeit highly skilled, being. Whether because they like the solitude just need more personal space or some other reasons, these spacers choose a solitary life among the stars.

HAULING CAPACITY

Jump Tugs can haul up to 5 times their own hull size in towed ships. Their actual performance (ADF/MR) depends on the total hull sizes of all the ships being towed on a specific jump. Table 1 summarizes some basic performance information about the Jump Tug giving the total Hull Size that can be towed for a given ADF/MR.

Ships are towed by attaching them to the long boom extending from the bow of the tug. Generally, the ships are arranged around the boom to balance out the center of mass and keep it in line with the center of mass of the tug. However, if hauling a ship of HS 13 or larger (or any single large vessel and a bunch of smaller ones), the large vessel is attached at the tip of the boom via the large force diffusing plate at the end of the boom. This allows the mass to be balanced properly for the trip.

ECONOMICS

While it is possible to make a bigger tug (based on a hull size 6 or 7 hull) with more (6 or 8) engines that could haul slightly more ships per jump, they are not cost effective. The hull size 5 ship described here are

Speed Limits

Maximum number of hull points worth of ships towable for a given ADF and MR

Tug Hull Size	5
Number of Engines	4
Maximum Total HS of Ships Hauled	25
Unloaded Max ADF/MR	6
Max total HS towable with ADF/MR of 1	25
Max total HS towable with ADF/MR of 2	10
Max total HS towable with ADF/MR of 3	5
Max total HS towable with ADF/MR of 4	2
Max total HS towable with ADF/MR of 5	1
Max total HS towable with ADF/MR of 6	0

cheaper to both purchase and operate than any potentially larger version. One Class C Atomic engine costs more than all of the rest of the ship systems combined. Thus, adding more engines, the most important part of the hauling power, dramatically increases the cost. On the other hand, it doesn't drastically increase the towing capacity. Doubling the engine count nearly doubles the cost of the ship but only gives a 32% increase in towing capacity. In addition, the larger ship would require more fuel per jump and more maintenance down time for overhauls.

Typical charges for a tow are 5000 cr per point of hull size per jump. However, depending on circumstances it could be as low as 2000 cr per point of hull size or as high as 16000 cr per point of hull size per jump. Depending on the destination, age of ship, number of ships being towed and other factors will also determine the price for a tow. Details are left to the discretion of the Referee (see "Operating a Jump Tug").

Example tow:

A HS 8 freighter needs a tow from Dramune to Prenglar. The route will take two jumps and connect through Cassidine. 5,000 x HS 8 = 40,000 Cr x 2 jumps = 80,000 Cr total.

OPERATING A JUMP TUG

Based on the Knight Hawks stats given below, the cost of a Jump Tug is 3,621,100 cr unfueled. It takes another 400,000 cr to completely fuel the tug enabling 10 jumps. Assuming the tug makes 40 jumps a year, has a crew of three (Pilot 4, Astrogator 3, Engineer 3) and spends an average of 10.5 days in annual maintenance. The total operating cost of the tug (maintenance cost, fuel and salaries) is 1,890,500 cr per year. Amortized over 40 jumps, that reduces to 47,263 credits per jump.   With a full load of 25 hull size worth of ships per jump this comes to 1891 cr per hull size per jump. This gives us the bare minimum a tug captain can charge and still break even, namely 2000 cr per hull size per jump.

However, this makes several assumptions. The biggest is that the ship is completely paid for! Assuming the captain financed 3.5 million cr (nearly all) of the cost of the ship for 10 years. That adds another 1,428,350 cr per year to the operating costs. Again amortized over the 40 jumps per year adds 35,709 cr per jump or 1429 cr per hull size.

Another assumption is that the tug makes all jumps completely full, i.e. hauling a full 25 hull sizes worth of ships. This is rarely the case, there are usually a few slots unfilled. In addition, if the tug is delivering ships to a remote system, there may be nothing to haul back to the SSC where the tug makes its base. In this case, there is nothing to defray the costs of the jump so they have to be absorbed into the cost of other jumps. Of course, if they are not hauling anything they can simply operate two of the four engines to save some cash.

In the end all, of these things go into figuring the cost of operating the the Jump Tug. The 5,000 cr per hull size per jump is just an average number assuming the ship is mostly paid for, the tug is relatively full and can usually bring back a few ships on a return trip.

DECK PLANS

The Jump Tug has four decks. They are, from top to bottom: the bridge, the crew deck, the airlock and engineering. Figure 2 shows the deck plans for the Jump Tug. Descriptions of the labeled areas of the ship are given below.

1) Elevator – The decks are connected by a single elevator (1.5m diameter) designed to carry a single being at a time. However, two can squeeze in if they want to get cozy. This elevator runs to all four decks of the ship
2) Pilot's Station – This computer station is the pilot's seat on the ship and has all of the controls for flying the ship.
3) Astrogator's Station – This is the Astrogator's workstation for plotting out the ship's jumps.
4) Main Computer – This is the main computer system for the ship housing all the ships functions and programs.
5) Crew rooms – Each room can be used by up to two beings. The rooms each contain a desk and chair as well as a bunk bed. The bed is mounted in such a way that one or both of the beds can be stowed up into the ceiling of the room to make additional floor space if desired. If only one being is using the room, the second bed can be permanently stowed with the first one being either at ground level or raised. In addition, if one of the inhabitants is a Vrusk, the second bed can be stowed with the first one raised and specialized Vrusk resting couch/bed can be placed on the ground level.
6) Restroom – This room contains a small sink, toilet facilities and a shower.
7) Common room – The common room contains a small table, four additional chairs and the

galley. There is also an entertainment center (area 8).

8) Entertainment Center and Life Support Machinery – This part of the ship is filled with an entertainment center to keep the crew occupied during the long voyages as well as part of the ship's life support equipment.

9) Ship Machinery – various parts of the ships life support system, computer, and other machinery fill up the majority of this deck.

10) Spacesuit storage locker – This room is primarily designed to hold the crews' spacesuits but can be used for miscellaneous storage as well.

11) Airlock – This is the ship's airlock. It can hold up to three space-suited beings at one time.

12) Entryway – Small entry room that beings entering or leaving the ship can use to remove or don their spacesuits.

13) Engineer's station – This is the engineering station on the ship and has the computer the engineer uses to monitor and control the ship. Can be used as an auxiliary bridge.

14) Storage – General storage locker for the ship.

15) Ship Machinery – More space taken up by general ship machinery.

16) Workpod – The ship's workpod. Used for hull repairs and to assist in mounting ships to be towed. Access is through a pressure door that links with the airlock of the workpod.

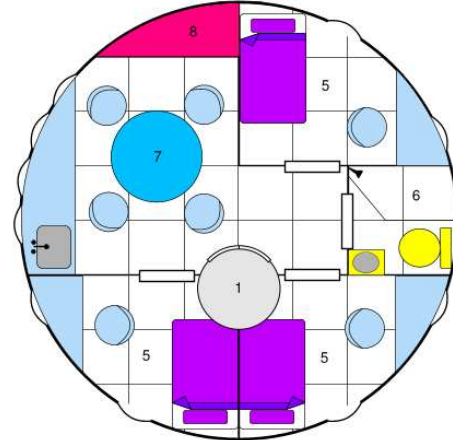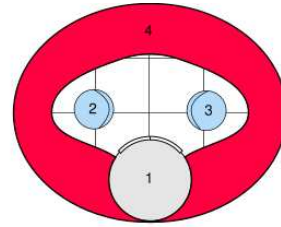17) Engine access tunnels – These tunnels allow access the engines from with the ship.
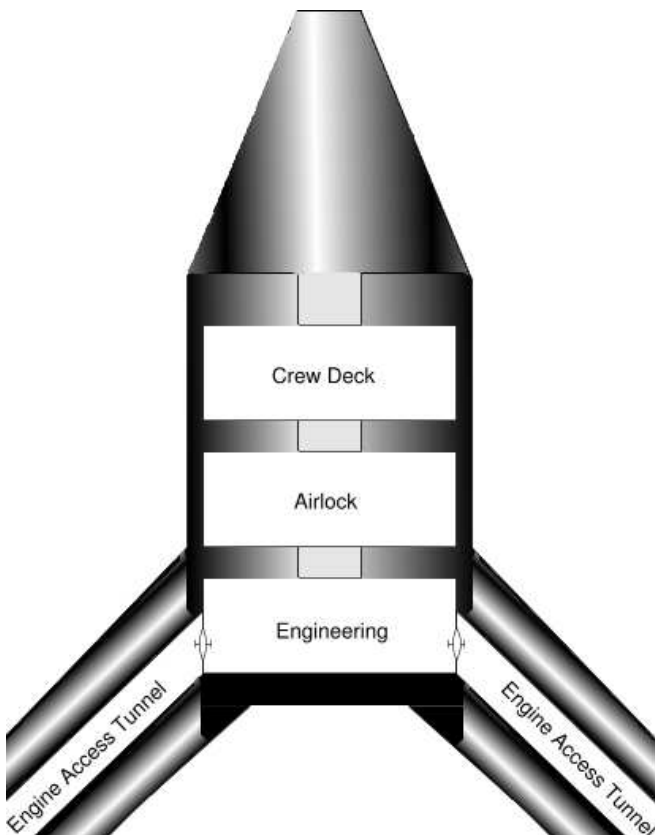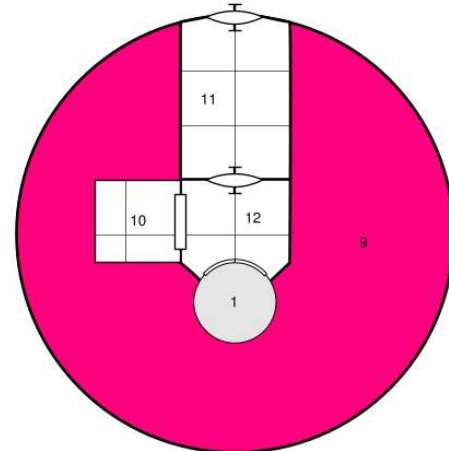
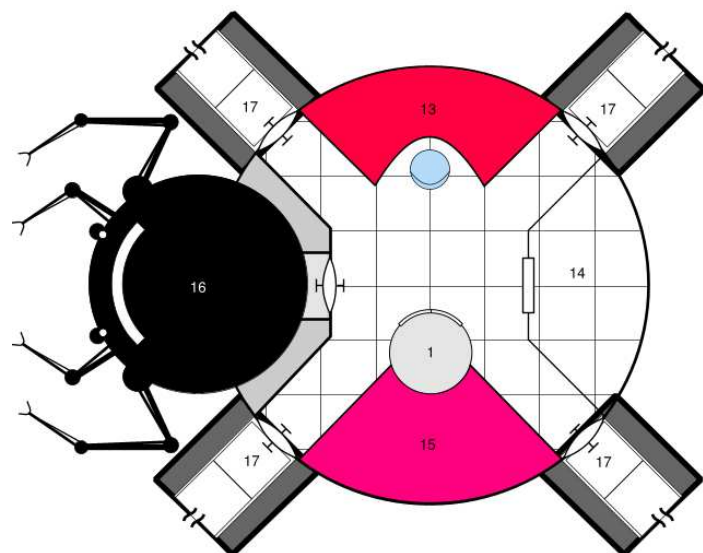**FIGURE 1 – JUMP TUG DECK LAYOUT**

FIGURE 2 – JUMP TUG DECK PLANS

Figure 1 is a close up of the body of the ship showing the relative placement of the decks inside the hull. Figure 3 shows the full ship to scale with its engines and the boom for attaching the ships to be towed. The boom is a solid piece of hull metal, 350m long and 2 m in diameter. The force diffusion plate on the end is a 1m thick plate 30m in diameter.

FULL KH STATS

Here are the full KH statistics for the Jump Tug.

Jump Tug
HS: 5
HP: 40
Engines: 4 Class C Atomic
Max ADF/MR[1]: 6/6 (when fully loaded, the Jump Tug has an ADF/MR of 1)
DCR: 35
Max Towing Capacity: 25 Hull Size worth of ships
Life Support: up to 6 beings, primary and backup
Crew Accommodations: 3 double occupancy cabins
Computer Level/Function points: Level 4/198 FP
Computer Programs: Drive 6, Life Support 1, Alarm 4, Computer Lockout 4, Damage Control 4, Astrogation 4, Commerce 1, Communications 1, Computer Security 2, Information Storage 1
Astrogation Equipment: Standard Starship
Communications Equipment: Radio w/4 screens, Subspace Radio, Intercom w/ 2 master panels and 10 speaker/mikes
Sensor Systems: Standard Radar, 10 Portholes, double camera system (for watching all the towed ships)
Weapons: None
Defenses: Reflective Hull
Ship's Vehicles: Workpod
Total Cost (unfueled): 3,621,100 cr (400,000 cr to fully fuel the engines).

[1] Assuming the Referee allows performance like this in the campaign. If not the upper limit can be whatever the Referee decides applies.

AUTHOR'S NOTE:

The baseline for the calculations in this article is the fact that a HS 15 ship requires 4 Class C Atomic engines and has an ADF/MR of 2. All of the math that went into ADF/MR and towing calculations were done using the hull size of the ships being towed, not their volume/mass as would be more realistic. This was done to keep with the simplicity that is Star Frontiers. Anyone who has ever really looked at the Knight Hawks "Hull Specification Chart" (p11 of the KH Campaign Book) has probably realized that the size of the ships do not increase linearly with hull size, rather they increase exponentially, i.e. a HS 10 ship is not 10 times bigger than a HS 1 ship. Rather it is almost 10,000 times bigger. Moreover, a HS 20 ship is 150,000 times bigger than a HS 1 ship, not just 20 times larger. Thus in reality, if my tug could tow one battleship (HS 20), it should be able to tow 150,000 fighters (HS 1) or 4800 Assault Scouts (HS 3) if you just looked at volume/mass. Obviously, that does not fit within the Knight Hawks cannon framework. In addition, the math required on the part of the GM/players gets involved and the point is to keep it simple. If it helps, you can think of the limitations imposed by using the hull size as coming from the attachment points on the towing boom. You can only cluster so many ships around the towing boom before all the attachment points are filled. To do this properly, where the ADF/MR reduction and number of ships towed was based on volume/mass instead of hull size, would actually require a rewriting of the star ship construction rules to bring hull size, ship volume and engine characteristics onto a consistent and realistic framework.

FIGURE 3 — JUMP TUG SILHOUETTE

CLASH BY NIGHT

By William Signs

"...do your duty!" Lieutenant Dann screams at him, as he aims his M16A4 electron rifle dead at the little prok—no more than six or seven—standing in front of him, its eyes saucer-wide, staring up at him, pleading for its life.

"'Evil sometimes wears a pleasing face,' soldier!" Lieutenant Dann reminds him, the prok's pleading taking on a seductive tone, as it rubs up against Y'onn, the Landfleet recruit feeling something stirring within him, as he begins lowering his weapon.

Until he catches a glimpse of the vibroblade in its right hand, the Yazirian pushing the filthy prok away from him, firing pulse after pulse from his electron rifle, the degenerate thing screaming luridly, as it burns....

Aboard the United Planetary Federation Ship
Strategos
In orbit, 1,000 kilometers from Hentz, Araks System
01/08/95, 02:22:18 Galactic Standard Time

"...live-fire exercise is about to commence," the voice over the intercom speakers drones, as the lid of Sergeant Y'onn Y'onzen's coldwire chamber hisses open, the machinery slowly bringing him back into the realm of the living and the harshly-lit reality of the training room floor, med techs removing electrodes and wires from him, as the Yazirian stretches himself, swinging his feet onto the deck, his every joint creaking, as he begins walking towards the chambers holding the remaining members of his squad.

All but one of whom are on their feet and standing at attention, Y'onn hearing the chamber holding Trooper Logan scream out warning, the medical technicans assigned to the maintenance of that chamber opening it up to remove the recruit's corpse—only the whites of his eyes are visible in their sockets—from the bundle of wires and electrodes maintaining his comatose state and the virtual reality enviroment in which they had all trained, the med techs laying him onto a gurney which a pair of maintenance bots trundle off to the biomass recyclers.

Y'onn feels nothing for the slain trooper, save contempt...after all, if he hadn't been morally inferior, he would have emerged from his induced coma, his death and reassignment in the life to come nothing more or less than the judgement meted out by the One for his sins.

The men under his command share his sentiment, Y'onn knows this without having to ask, just by looking into the hard, cold eyes of the four surviving members of his squad.

"Company," the voice of the first sergeant, Master Sergeant Corin James, snaps out, *"atten-shut!"*

Y'onn takes his place alongside his squad, snapping to attention, as James and Captain Bavla Oropoho slowly walk past the members of their company, formed up into their respective platoons and squads, both men speaking into their headset comps, holograms floating in front of each man's right eye scrolling lines of data.

"I see you're a man short, Sergeant," Captain Oropoho says, the red-furred Yazirian eyeing Y'onn as if he were creet on the soles of his boots.

"Coldwire failure, Master," Y'onn replies instantly, Oropoho remarking, "I see."

"*And*," he then adds, consulting his headset comp, "according to the Lieutenant Dann AI program, you hesitated, for precisely 3.3 seconds, before prosecuting your last target."

"Yes, Master," Y'onn says simply.

"What do you have to say for yourself, Sergeant?" Oropoho then asks, Y'onn replying, his head bowed, "I make no excuse for either of the failures on my part, Master."

The company commander nods his head, remarking, "a wise decision, *Private.* Your Morality Index is reduced to 25%. Corporal Bayless, you are now in charge of this squad, and your Morality Index is provisionally increased to 55%, pending the final decision of the ship's Morality Review Committee."

"Yes, Master! Thank you, Master!" both Y'onn and newly-elevated Sergeant Ansen Bayless both reply, before Master Sergeant James shouts out, *"company to the drop ship!"*

Aboard the UPFS *Strategos*
In orbit, 1,000 kilometers from Hentz, Araks System
01/08/95, 02:27:06 GST

Rear Admiral Jacob Maar sits back in his command chair, watching the activity on the *Strategos'* red-lit bridge, as the UPF training vessel eases into orbit around the Hentz Planetary Non-Citizen Containment Matrix, preparing itself to unleash its contingent of enlisted recruits and officer cadets on the proks incarcerated below.

It is the culmination of forty days of the most intense coldwire training, political indoctrination, live-fire exercises, physical and psychological conditioning in the New Frontier; at the end of this exercise those who were found worthy of serving the Great Cause would become the latest members of the Spacefleet, Landfleet and Special Security Division—each serving in the capacity determined by his Morality Index Number—while those found wanting would be reassigned.

"Planetary governor on line for you, Commandant," the comm tech on duty reports.

"Put him through," Maar replies.

"Good morning, Admiral," the repellent image of the Zuraqquor serving as the governor of this NOCCM clicks and buzzes.

"Governor," Maar replies, nodding his head slightly.

"You may proceed when you are ready, Admiral," the gnat informs him. "The guards, overseers, and the local garrison have all been instructed not to interfere in the graduation exercise and to otherwise extend you every courtesy."

"Thank you, Master," Maar replies, swallowing down the bile which comes from having to extend to it the courtesy required from a citizen of the New Frontier to his moral superiors.

"We shall begin at once," he adds, "*Strategos* out."

"Flight control," he barks into his headset comp, "bridge, launch all fighters, bombers and dropships; gunnery deck, initiate orbital bombar—"

"*Admiral,*" the chief sensor technican screams hysterically, " *Star Forces* Pugilist-*class war cruiser at minus eight-five, eighteen-fifty Zulu, coming in fast at 15,000!*"

"And, should *that* be a cause for concern?" Maar rebukes the lesser man. "Defensive, raise the mag shielding, launch interceptors and anti-beam missiles; gunners, fire at—"

"*Multiple torpedos inbound!*" the chief sensor tech continues his damnable screeching, the *Strategos*' executive officer barking out, "pilot, break orbit and initate evasive manuvers; flight control, proceed with the launch of all fighters, bombers and dro—"

The bridge trembles and goes dark, alarms howling, as explosions tear through the UPF training vessel.

**Aboard the Free Alliance Ship *Shadowboxer*
12,120 kilometers from Hentz, Araks System
01/08/95, 02:33:11 GST**

"Pilot, ready main beams," Captain Alissa Quin orders, as the side of the massive *Leviathan* erupts in hot gas and debris. "Gunnery deck, stand by to fire medium laser batteries."

"Main beams, ready, aye, Captain," the *Shadowboxer's* pilot and second in command, Lieutenant Delia Cael, reports, at the same time the holo of Ensign Bloout, the war cruiser's gunnery officer, says, "medium las batteries standing by, ready to let 'em have it with another salvo."

"Not yet, Bloout," Ali says to the Dral, at the same the sensor tech reports, "enemy vessel opening fire with seekers and electron batteries."

"Evasive maneuvers, pilot," Ali orders."Defensive, launch interceptors and anti-beam missiles; sensors, keep an eye out, just in case—"

The *Shadowboxer's* flight engineer, Ensign Atan, lets out a long, low whistle, as another explosion rips through the wounded side of the enemy *Leviathan,* as it plummets towards the surface of Hentz.

Ali can't let this distract her or her crew.

"Sensors—" she starts to say, before the tech, Chief Petty Officer Karish Navaya, reports, "Fortress Hentz opening fire on us with missile and electron batteries; am reading fighter and large craft launches from both the orbital fortress and the planet's surface."
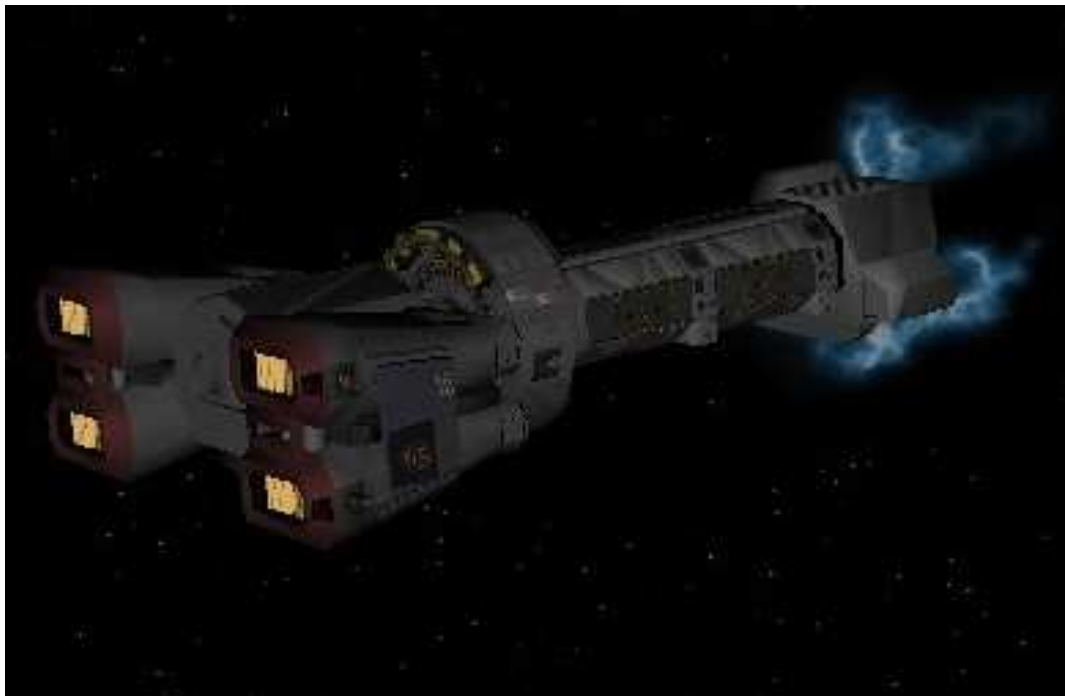
Ali calls up the tactical display on her command station's holoprojector, the commander of the *Shadowboxer* glancing up at the master holoprojector—in front of the piloting and astrogation stations at the forward part of the *Pugilist*-class war cruiser's red-lit bridge—as it shows her the orbital fortress wreathed in the bluish-gold fog of detonating anti-beam ordinance, one of the numbers in white on either side of the image rolling rapidly backward, as the 605-ton cruiser continues closing with it at 2,880 kilometers per second.

"Fortress Hentz now 180 meters off our bow," the ship's astrogator, Ensign Star Forces Y'aken T'kk, reports a few moments later.

"Guns, pilot," Ali barks out, "target the fortress' airdock."

Green crosshairs now appear over the looming image of the fortress, zeroing in on the brightly-lit chasm at the center of the cluster of platforms and modules comprising the orbital fortress, a tone humming in Ali's ears, as she snaps out: *"All beams, fire!"*

Blue-white shafts of light almost hurtful to the eye searing forth from the six heavy laser cannon in the war cruiser's nose, thinner beams of hot light hissing from the three medium laser cannon in turrets on top and to either side of the ship's diamond-shaped spaceframe, explosions erupting from the airdock, ripping through the orbital, as Dee jerks the ship down and sharply to the right.

Maar almost imagines he hears his ship screaming, as it struggles against the gravity dragging it down to its impending death, the head of the UPF Military Training Command preferring that to survival, as the latter alternative would almost certainly lead to either demotion, or—True God forbid—reassignment.

Maar knows he deserves nothing less for his failure, for the loss of so many potential soldiers for the Great Cause... the casualty figures floating over his command station continue their steady climb upward, another holo showing the schematic of the *Strategos*, too many parts of it blood red, indicating systems destroyed by the explosions in the training vessel's hangar bay and the fire it had spawned.

Lightning shoots up from the planet's surface, and the missile alarm buzzes in Ali's ears, Dee wrenching the joystick in her left hand in every direction at once, crushing the firing button at the top of the stick, the main lasers sizzling forth to knock out planetary-defense batteries, as *Shadowboxer* skips across Hentz's upper atmosphere like a stone on the surface of a pond.

A sudden jolt presses Maar into his chair, threatening to shake his bones loose, *Strategos* starting to climb, gradually pulling free of Hentz's gravity, the chief engineering officer's holo appearing in front of his right eye.

"Void speed achieved," T'kk reports, "Void field generator coming on line, engine computer answering astrocomp commands, Void entry in three, two, one—"
The starfield in the master holoprojector stretches like taffy, *Shadowboxer* entering that alternate reality poet and spacer alike have taken to calling the Void, the Void field generator allowing the war cruiser to achieve zero relativistic mass, before the Void engine's thrust grants it imaginary relativistic mass and, thus, faster-than-light travel.

"Master," the gnat reports, " Void engines are back on line at full power, and we have successfully extinguished the fire. All other systems are under repair."

The Free Alliance war cruiser takes just seconds to travel the five billion kilometers between Hentz and the nameless iceball world at the system's outer edge, *Shadowboxer* emerging from the Void high over its northern pole, Dee flipping the ship over, decelerating slightly, the ship neverthless leaving the planet behind, as continues moving at 2,600 kilometers per second.
"Astrogator," Ali orders, as Dee flips *Shadowboxer* back over, nose pointed in the general direction of the Wayland system twelve light years away, "plot a course back to Verdant."

"Weapon status, XO?" Maar barks out, Space Commander Braden Cotter replying, "main beams remain offline, Master, and only ten percent of the ship's battery weapons are available."
"Missiles?" Maar asks.

"Both ordinance bays have been destroyed, Master," Cotter replies, "along with their seekers and torpedos. All drones are available, however."

"Engineering," Maar orders, just as his fifty-seven million ton modified *Leviathan*-class dreadnaught completes its long climb back into space, "concentrate your efforts on restoring the primary beam weapons. Sensors, I want a subspace radar sweep of the entire system."

"All hands," she adds, ice-blue eyes fixed on the tactical display floating above her station, "remain at battle stations."

"You are to *find* that Free Alliance ship," he adds, knowing this is the only way he can redeem himself.

Aboard the UPFS *Strategos*
1.5 kilometers over Hentz, Araks System
01/08/95, 02:32:58 GST

"*When* you find it," he says, "you will upload the coordinates to the chief astrogator."

"Yes, Master," the chief sensor tech replies.

"Master," the comm tech then reports,"Fortress Hentz on line, reporting severe damage to their airdock, weapons systems, command and crew decks."

"They," he adds, "request a report on our status."

"Our status," Maar tells the comm tech, "is we are currently engaged in the pursuit of the enemy craft which attacked us."

"Tell them that," he says, his eyes fixed on the starfield in the master holoprojector.

Aboard the UPFS *Strategos*
In orbit, 2,100 kilometers over Hentz, Araks System
01/08/95, 02:37:11 GST

"*Get up*, damn you!" Bayless spits out, kicking Y'onn a second time through the tears in his powered skeinsuit, the sharp pain of the kick getting through the dull haze brought on by all the other pain, the Yazirian struggling to his feet, the servos in his suit whining in protest as they help him to stand.

Y'onn consults his suit's computer to determine the extent of the damage to it and himself, the Landfleet private already tasting the salty metallic tang of his own blood, as it runs down his face into his mouth.
The suit's systems are not much better off, its sensors, radar, communications, and the camera built into his weapon are all offline, same with the enviromental control system.

It has to be malfunctioning, he concludes, after he dials the temp up even higher than his race could normally tolerate, and he's still shivering from the cold.

"Move!" Bayless snaps at him, prodding him with a shock stick, Y'onn turning, noticing the SSD provost his squad leader had borrowed the shock stick from is dead, his neck broken, blood seeping slowly from the corner of his mouth.

It's then he realizes what a mess the dropship's troop bay is, how little of it remains intact...how many of his company are lying dead and broken all over the deck.

Y'onn remembers what happened now...the dropship had just lifted from the hangar bay, when the alarm had sounded, and the ship had just slammed itself into the deck...it had been between the ship crashing and the Yazirian losing consciousness when the restraints holding Y'onn in his seat had sheared themselves free of their mountings.

He shivers again, a dull aching throbbing up and down his body, two more prods from the shock stick in Bayless' hand convincing him to move towards the nearest exit.

That exit being a gaping hole near what remains of the dropship's tail section, a dozen more prods from the

shock stick getting him to move through the hole, into the hangar bay itself.

True God in Heaven, what a mess, Y'onn woozily thinks to himself, taking in the carnage and ruin around him, watching maintenance bots dig out parts and pieces of bodies from the twisted, charred and broken remains of fighters, bombers and dropships, the stench of burnt flesh and machinery assaulting his nose through the filters of his helmet.

He joins two other survivors from his squad, what remains of his company forming ragged ranks along one end of the wrecked hangar bay, one of the junior lieutenants, a Human Y'onn doesn't recognize, walking with Master Sergeant James, as they inspect the survivors.

"You'll have to do," the junior lieutenant concludes, adding, "we've orders to report to the forward gunnery deck at once; those who are qualified will man weapons, while the rest assist the engineers in effecting repairs to the main beams."

"*Company,*" James snaps, "*move out!"*

Aboard the FAS *Shadowboxer*
15.5 billion kilometers from Araks X, Araks System
01/08/95, 05:21:08 GST

"Thank you," Ali says to the bot as it offers her a sandwich and a cup of hot, strong, black coffee from the tray in its hands.

"You're welcome, Captain," the bot replies, before moving to the rest of the bridge crew, who'd been at their stations since they'd left Verdant twelve days ago, and didn't dare leave them now, not with the thugs of the New Frontier bound to come gunning for them any time, *especially* just as they'd finished the calculations for the jump back to base.

"The Universe never waits for the right time to creet on you," runs the famous quote of Margaurite Dermond's through Ali's head, as she continues studying the tactical display... T'kk and the ship's astrocomp need another seven hours to finish their calculations, and, with *Shadowboxer* alternately maintaining near-Void speed and microjumping, variables continue changing, requiring the Vrusk female and the astrocomp to constantly recalculate.

But, she observes, taking a bite from the thick meat and cheese sandwich, *if we slow down, so they can do it right, we'll be sitting waterfowl when the Spacefleet comes looking for our blood.*

Or worse, she just has to add, the commander of the *Shadowboxer* cursing herself, both for letting the tight control she's held over the memories of Kdikit slip... and, for still remembering, twenty years after having found a way out of that hell.

Twenty years after her nightmare had consumed the entire gods-damned Frontier.

She sighs, nodding her head absently, as she sips at her coffee, wondering for the nth time precisely when in the Hells the closure everyone constantly rambled on about was supposed to take place, when she would come to the point in her life where she could move forward, because she was damned if she's seen it yet, it was as if....

Tears run hot and wet down her cheeks, Ali cursing herself for that weakness, for now is *not* the time for it...later, when her crew was safe, and she could shut herself up in her quarters or in *Shadowboxer's* cubbyhole of a gym, just her and the heavy bag.

Dee doesn't need to know.

She can't possibly know, no matter how much she tries, her parents are both still alive on Gollywog, along with all her siblings, and the gods-damned voggin' planet had never been occupied by Streelies and their pet gods-damned worms....

A final sigh, Ali staring up at the star-shot black floating in the master holoprojector, as she takes another bite of her sandwich.

More memories better left where they were.

She can't afford the luxury of remembering right now.

Later.

Maybe.

...it actually thinks such a thing could move him. He shows it just what happens to those who try to trick their superiors with fake tears, laying the electrowhip into it over and over, the prok's sobbing turning to screaming.

Screaming which only serves to egg him on....

Aboard the UPFS *Strategos*
3,000 kilometers from Hentz, Araks System
01/08/95, 05:26:11 GST

...the chime in his ears wakes Maar, the reader—images of proks doing what proks like doing best running across its flatscreen—falling from his lap onto the floor of his underway cabin, the master of the *Strategos* swallowing several times to moisten his throat before speaking into the mic of his headset comp:

"What is it?"

Cotter's holo appears in front of Maar's right eye, the ship's second in command, as always, wasting little time in coming to the point:

"We've located them, Master, at the outer edge of the system, approximately twenty billion kilometers from Hentz; it appears they are alternating between microjumps and near-Void speed, as they attempt to calculate a return jump course to their base."

"Do you have an estimate as to how long it will be before they are ready to jump?" Maar asks, already knowing.

"Less than seven hours, Master," Cotter replies. "We, on the other hand, will be unable to jump for another—"

"Instruct the engineers," Maar orders, "and the astrogators to jump at once."

"Master—" Cotter starts to object, Maar instantly silencing the lesser man:

"This ship is to jump *at once,* Space Commander, and I have no wish to hear any excuses as to why my orders cannot or *will* not be obeyed. *Am I clear?!*"

Cotter dryswallows, his face pale, as he replies: "Yes, Master. Bridge out."

Aboard the UPFS *Strategos*
3,000 kilometers from Hentz, Araks System
01/08/95, 05:26:11 GST

Cotter knows he cannot show weakness in the presence of inferiors.

Leaning back in the command station, forcing himself to suppress his baser instincts, he barks out, "you heard the Commandant; astrogation and engineering will prepare the ship for immediate emergency microjump."

Cotter tries despeately not to concern himself with consequences*...Strategos*' Void engines are already straining to maintain seven gravities' acceleration without losing power or, worse, containment, and now, what Commandant Maar has just ordered his crew to do....

He takes a deep breath...the ship's Void engines would be forced to annihilate matter and antimatter at a rate certain to overload containment, and *Strategos* would blaze brightly across the sky of Hentz, as her surviving crew and trainees died an instant and immediate death.

He realizes that outcome should fill his heart with joy, instead of fear; after all, he has spent his life in service to the Great Cause, fighting for the redeemption of the Wilderness and attempting to bring their worlds into the dawn of the New Frontier.

His death will be in the service of the Great Cause as well, his place in the life to come as certain as the final victory of the One True God over the heathens in the Wilderness and the Dark Lady whose harlots and slaves they choose to be.

So, he is not afraid.

Nor is the chief astrogator, Fleet Lieutenant Fezdes Zawnee, who is quick to report, "Void engines answering astrocomp commands, Master; engine computer now directing masses of matter and antimatter necessary for emergency microjump. Intercept course for Star Forces cruiser now plotted and ready for execution."

The chief engineer, Fleet Lieutenant Zal'la'has'she, is equally unafraid, the Zuraqquor's holoimage replying in the midst of klaxons braying in the background, "Void engine safeties overriden, engine computer answering astrocomp commands and directing overload power to Void field generators—"

Klaxons now howl across the bridge, *Strategos'* master computer relaying the engine computer's warning of imminent containment failure at the same time Zawnee reports, "Void field generators coming on line, Void entry in five, four—"

"—failure in three, two—" the mastercomp announces in counterpoint.

Cotter fondles the Wheel hanging from the chain around his neck, softly repeating the 46th Affirmation to himself in the second or two which remains, *Strategos'* second in command fighting the urge to close his eyes, determined to face whatever comes.

"*Though death stalks me, I shall not know fear, for the love of the One True God is proof against the wages of moral inferiority, a perfect love filling my heart and strengthening my soul, a perfect love which permits me to live, when all others are condemned to die by their Progenitor and their L—"*

Space and time distort themselves, the modified *Leviathan*-class dreadnaught entering the Void, in spite of all the odds against it, even more proof positive of the True God and the rewards bestowed upon those who accepted Him and His Perfect Love as a slave accepts a just master's dominion over his body and soul.

Blindly and without question.

Space and time shift again, the stars righting themselves, as *Strategos* emerges from the Void, less than a kilometer from the enemy war cruiser.

"Master," Zawnee reports, as the bridge trembles and rains sparks and debris down upon all of them, "we have successfully executed emergency microjump."

"Of course," Cotter replies, his faith in Him that much stronger for the trial he'd just endured.

"Did you doubt we would, Astrogator?" he asks, even as a renewed stream of damage reports come from all over the ship.

"No, Master," the chief astrogator replies.

**Aboard the UPFS *Strategos*
15.9 billion kilometers from Araks X, Araks System
01/08/95, 05:27:00 GST**

The weak are quick to scream and cry out for mercy, as energy arcs into them.

The junior lieutenant who had assumed command of the company is one of those who screams, as he dies.

He wasn't worthy of leading us, Y'onn, fighting a renewed wave of nausea, observes, as he turns his attention back to the task of splicing more wiring together, forcing his hands to remain rock steady, in spite of the numbing chill gripping his body.

"Work faster!" Bayless screams from behind him, jabbing Y'onn in the back with his shock stick.

"Yes, Master," the Yazirian replies, his squad leader screaming, "we are about to engage the enemy, Private Y'onzen. We have *got* to bring the main beams on line, *now!"*

*"*Yes, Master," Y'onn says, forcing hands that are steadily losing all feeling to work faster, harder, more accurately at a task to which they are not accumstomed.

However, Y'onn knows lack of expertise is only an excuse.

Proks make excuses, and he isn't one of *them*.

If he failed in this effort for the Great Cause, he would acknowledge that failure, face whatever judgement was due him for that failure, and emerge from that judgement a better servant of the One in the life to come, if not in this one.

It is the strength he derives from that certainty which allows Y'onn to continue working, in spite of his lack of skill and the cold making his body tremble in spite of his efforts.

The lights dim, as those manning the ship's working battery weapons open fire, Y'onn hearing the voices of the drone operators reporting the launch of robotically-piloted fighters and multi-missile platforms echoing at the edge of his consciousness, the severed ends of wire in the Yazirian's fingers fading in and out of view.

Y'onn is thankful for the shock stick, when it lances through momentary weakness to restore focus to his efforts.

"Thank you, Master," he says, as he continues.

**Aboard the FAS *Shadowboxer*
16.2 billion kilometers from Araks X, Araks System
01/08/95, 05:28:06 GST**

"Vog," Dee curses, electron beams and mass-driven projectiles streaking past *Shadowboxer,* even as the war cruiser pulls away from the horribly-wounded *Leviathan*-class dreadnaught which has emerged from the Void virtually on top of them.

The enemy craft is bleeding antimatter and coolant from two ruptured Void engines, the other three thrusting it forward in an attempt to close the distance with the smaller cruiser, an arrowhead of drone fighters and multi-missile drones dropping from its belly, rapidly moving to swarm the Free Alliance warship.

Ali watches this on the tactical display, asking her astrogator, "time until the next Void entry?"

"Void entry in ten seconds, Captain," T'kk replies, Ali working up a microjump course on her workstation, uploading it to the ship's astrocomp.

"New course received," the Vrusk informs her, just as the Void field generator engages, and, once again, the ship leaves normal space, re-entering it at no less than sixty meters from the *Leviathan's* starboard quarter.

"All beams *fire!"* Ali snaps out, as her *Shadowboxer* scrapes along the other ship's side at 2,930 kilometers per second. "Guns, launch two torpedos; astrogator, new course has been uploaded to the astrocomp."

"Acknowledged, Captain," T'kk replies, Ali catching a glimpse of the main beams, medium las batteries and a pair of Sledgehammer torps striking home, as the war cruiser ducks back into the Void, emerging from it along the *Leviathan's* port side, Dee stabbing out with the main beams, Bloout's gunners following up with the las batteries and another pair of torps.

"Captain—" Karish starts to report, Ali replying, "I see 'em, Chief. Astrogator—"

"Void entry on new course," T'kk, maddeningly matter of factly reports, as the dreadnaught's drones—all 1,440 of them—arc back to intercept the cruiser, "in five, four, three—"
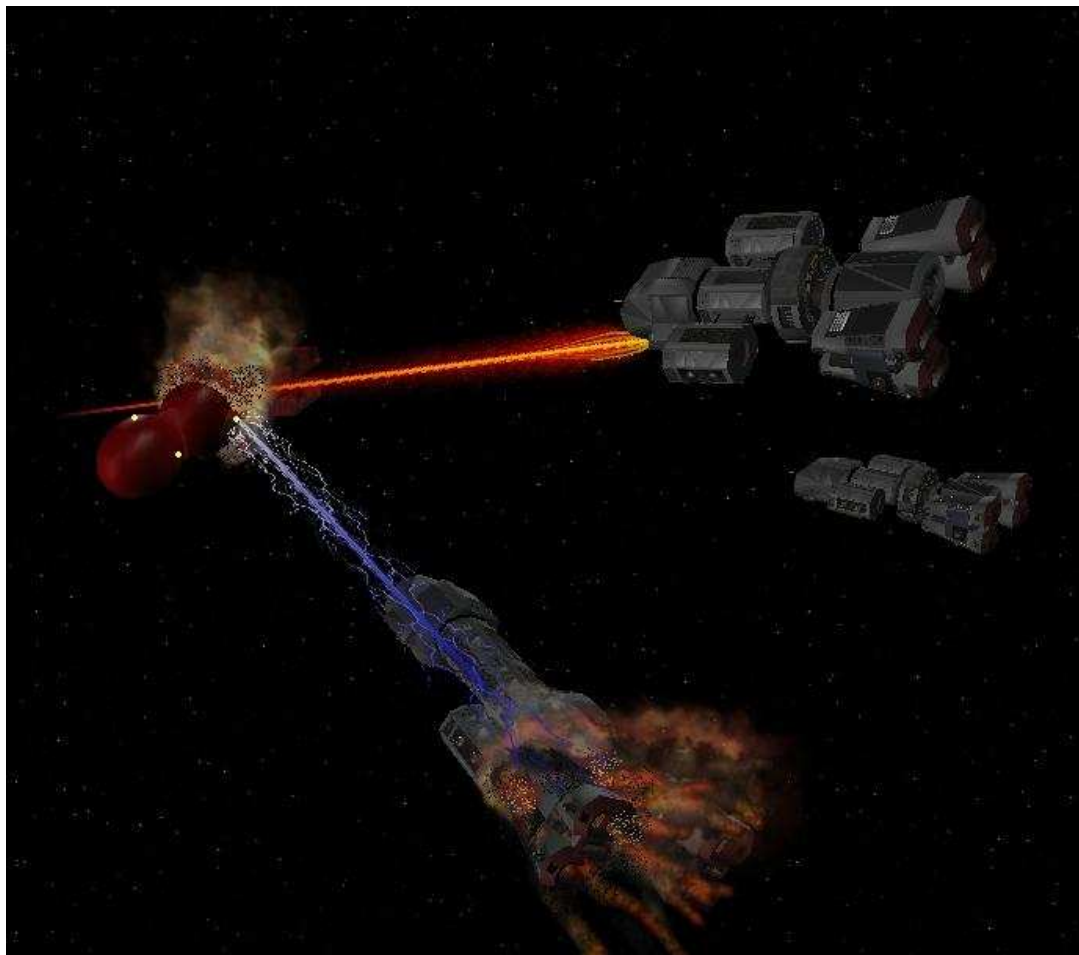
"Eternal Light of Space," Dee whispers, "guide our path."

"Defensive," Ali orders, "stand by on interceptors

Shadowboxer enters the Void just as seekers from the multi-missile drones streak towards her, returning to normal space some 2,000 kilometers from the *Leviathan.*

"Drone fighters and multi-missile drones still in pursuit, Captain," Karish reports, "current velocity 1 kilometer per second and accelerating."

"The *Leviathan,"* the young Yazirian adds, voice incredulous, "is also continuing to pursue...he's pushing his two surviving Void engines to the firewall."

Aboard the UPFS *Strategos*
16.4 billion kilometers from Araks X, Araks System
01/08/95, 05:29:26 GST

"Velocity," Commander Spacefleet V'kat reports, "now one kilometer per second and accelerating."

"Engineering," Maar orders, as the maintenance bots haul away Cotter's burned, broken body for recycling, "shut off those vogging alarms."

As if in reply to its master's command, the ship begins groaning and screeching, the surviving bridge lights

and holodisplays flickering, as the alarms warning of imminent containment failure in *Strategos'* two surviving Void engines—now providing five gravities' acceleration—cease abruptly.

"Status of main beams?" Maar asks, *Strategos'* chief pilot replying instantly, "the engineers report twelve of the ship's heavy electron cannon have been brought back on line, Master."

The Vrusk male poises the thumb of its upper left hand over the firing switch on the control stick, its antennae quivering in anticipation of its commander's next order. "Do you think you can target its Void engine at this range, Commander?" Maar asks.

"Yes, Master," the arachnid replies.

"Then, that's what I want," Maar orders. "Shoot out its engine so that we can close to grappling range."

"Master," V'kat points out, "it will take some time before we are able to grapple them.

"I am well aware of that, Commander," Maar replies, smiling thinly.

"I am," he repeats, "well aware of that."

Aboard the UPFS *Strategos*
16.4 billion kilometers from Araks X, Araks System
01/08/95, 05:30:13 GST

Y'onn is dimly aware of cheering, as the gunnery deck lights flicker out, and some of the repaired main beams discharge.

"This," the Yazirian hears Bayless echo, as a slap on his shoulder shoots fresh pain throughout his body, "will all be over soon, Y'onzen."

"Enemy craft has executed another micro jump," comes a Vruskian voice over the intercom, as the gunnery deck turns dark again, and Y'onn shivers from the cold.

"Trembling, Private?!" Bayless asks.

"Are you *afraid?"* he adds, Y'onn cursing his weakness and inability to control his own body.

"N-no, M-m-master," Y'onn replies through chattering teeth, the soldier finally gritting them together, adding, "I know my place in the life to come."

"Presumption," his squad leader remarks, his voice echoing worse than before in the Yazirian's ringing ears, "on top of hesitation in the face of the enemy, on *top* of *fear,* when we are at the cusp of delivering righteous retribution to our enemies."

"Don't," Bayless adds, barely audiable over the drone operators' cursing, "bother telling me what you meant by your remark, Private, you've said more than enough to—*what the vog do you think you're doing?!"*

Y'onn doesn't know how he's ended up lying face down on the deck.

It doesn't matter.

He *has* to get up.

Now.

But his body has turned traitor to himself and the Great Cause, the limp, freezing cold lump of flesh no longer responsive to his commands, no matter how many times Bayless jabs the shock stick into it, no matter how many times the Human squad leader screams for him to "get up, *get up, you filthy prok*, get *up*!"

Another jab of the shock stick causes Y'onn's body to convulse, the treacherous thing fighting for every last breath*,* Bayless continuing to scream at him, punctuating jabs of the shock stick with kicks from his boots.

"*Don't you* dare *think,"* his squad leader's voice, coming from the top of the dark well down which Y'onn feels himself falling free, "*for an instant, you can avoid responsibility for your actions simply by—"*

Aboard the FAS *Shadowboxer*
16.4 billion kilometers from Araks X, Araks System
01/08/95, 05:32:19 GST

"He's not giving up," Dee observes, jinking hard to avoid incoming electron beams from both the *Leviathan* and its drones.

"I know," Ali replies, her voice taut, the missile warning droning in her ears, as even more seekers hurtle towards them, *Shadowboxer's* interceptor launchers furiously volleying missiles of their own in response.

"Enemy dreadnaught continues to remain within effective main beam range," Karish reports, "velocity now 1,650 meters per second; velocity of enemy drone craft 25 kilometers per second and continuing to close."

Heavy electron beams sizzle past the *Puglist*-class war cruiser, whose own medium las turrets slash across the space behind her to shoot down drone craft by the score, the interceptors adding to that number, while anti-beam missiles detonate to form a line of chaff and ice fog nearly four kilometers behind the ship.

"Our turn again," Ali observes.

"Defensive, launch decoy," she orders, uploading course telemetry to the astrocomp. "Astrogation, stand by."

"Decoy away," Petty Officer K'kree's holo reports, T'kk adding, "Void entry in five, four—"

"Bloout," Ali says, "launch a pair of torps, set for radiation seeking, the moment we emerge from the Void."

"Torps standing by," the Dral gunnery officer replies, as *Shadowboxer* slips back into the Void.

Aboard the UPFS *Strategos*
16.4 billion kilometers from Araks X, Araks System
01/08/95, 05:33:06 GST

"Got it," V'kat exults in triumph, one of the main beams striking home in spite of the cloud of anti-beam ordinance between it and the cruiser.

"Good," Maar comments. "Stand by grapples. Landfleet detachment commander, bridge, have a platoon standing by at the forward air—"

The missile warning screams in his head, the chief sensor tech reporting, "*Torpedos inbound, dead astern and closing f—*"

The bridge trembles one last time, before going dark and dead, the ship rocking from a massive explosion, the chief engineer reporting over Maar's headset comp, "one of their torps hit home, Master, taking out the number two Void engine; number five engine's still on line, at minimal output. Power's out all over the ship, life support's barely operational—"

Strategos reels from another explosion.

"Damage control parties reporting an uncontrolled fire," the gnat adds, "in the gunnery deck; attempts to evacuate the deck are unsuccessful, due to extensive damage to the life support system controls."

"Do we have power for the main beams?" Maar asks.

"No, Master," V'kat replies in the darkness, as still another explosion convulses the UPF training vessel. "Main beams are now offline."

"Master," the chief engineer reports, "we are expiriencing containment failure in number five Void engine."

"We," it adds, "are unable to correct it."

Maar nods his head...perhaps, in the life to come, he—

Aboard the FAS *Shadowboxer*
20.0 billion kilometers from Araks X, Araks System
01/08/95, 05:34:01 GST

"That's it, then," Ali says, after Karish reports the destruction of the *Leviathan.*

"Keep scanning," she adds. "Astrogator, resume jump calculations for Verdant; pilot, maintain present course and speed."

"All crew," she then says, not having to, "maintain battle stations."

She resumes eating her sandwich, sipping at her coffee, but still, Ali doesn't relax.

She still sees no reason to relax.

Her eyes remain fixed to the empty tactical display floating over her command station, the captain of the *Shadowboxer* focussing on the here and now, on what the enemy could be sending next after her ship and its crew of fifteen.

Memories of the past staying locked down, where they belong.

Until she can deal with them.

Later.

Maybe.

Aboard the UPFS *Strategos*
In orbit, 1,000 kilometers over Gran Quivera , Prenglar System
01/18/95, 12:02:07 GST

Rear Admiral Jacob Maar sits at the center of the long table in a dark, isolated corner of the resurrected UPF training vessel, studying holofootage from the battle in the Araks system a tenday ago, before turning to the other members of the ship's Morality Review Committee, asking:

"What say you all, on the matter of the Landfleet soldiers who perished on the gunnery deck."

"They failed," says the Landfleet detachment commander, Brigadier Thaddeus Fisch, "to destroy the enemy cruiser."

"Stemming," observes the ship's political instruction officer, Colonel Razzak Sherakee, "from the failure of their fellow soldiers to quickly repair the damage to the main beam weapons."

"There were even documented incidents," states the ship's executive officer, Commodore Braden Cotter, as he fingers the Wheel pendant around his neck, "of soldiers trembling in fear and *dying* in an attempt to avoid responsbility for their failures."

"Reassignment," intones the commander of the ship's air group, Space Commander Terrence Boone.

"Reassignment," the others agree.

"For all of them," Maar says.

"So mote it be," chant the members of the Committee as one.

ADVENTURE PETS

By C. J. Williams

Most people love animals, and some love the idea of having exotic animals as pets, or even as mounts. Having such a creature can be a big help to a character in a wilderness setting or where a little extra protection could help, or in a setting where a little trickery is needed.

Animals in your campaign can make for interesting party members and companions. You could even run a 2-player campaign where one player plays the animal and another player plays the animal's owner. Of course, such an arrangement requires that the one playing the animal has an enthusiasm for roleplaying the part, otherwise there could be dissatisfaction.

WHO ROLEPLAYS THE PET

In most circumstances, the Referee that allows the pets, controls the pets. That is, the Referee is responsible for dictating a pet's actions and how it responds to its master. However, the Referee should also be familiar with the relationship between the animal and its master and recognize that an animal won't stay with a master it doesn't like, so almost certainly loves its master.

The best guide of such animal behavior is going to be a Referee that is familiar with animal behavior. If a Referee does not feel comfortable roleplaying a pet, they can assign the pet to a willing player different than the one playing the pet's owner.

ROLEPLAYING PETS AND THEIR MASTERS

Whether the Referee or another player roleplays the pet, it is important that they make the pet as interesting as any other of the group's members.

A pet's player shouldn't just say "he goes and gets it and brings it back." Instead, they should say "I look at my beloved master with a double-take, unsure if I should follow through or not, and then I run down his sleeve and weave my way around the room, dodging feet and making sure not to disturb anyone. When I get there, I look around, then grab the compad and hobble over as I clutch the thing to my body, wondering if my master truly appreciates the effort and danger I'm going through to steal it. When I get back, I drop it in his hand and then climb up his arm and tug on his ear, chittering irritatedly for a treat."

Animals show fealty for the one that feeds them, takes care of them, and disciplines them. An animal will want to take care of its master in the same way that the master takes care of them, but it is important that the master always maintain the position of master, or else they will lose the respect of their animal. It can even make the relationship between the character and their pet more interesting if the pet challenges them from time-to-time, making the player roleplay their position as master.

Such challenges by the pet can be in the form of demanding attention to attempting to ignore a command. The player of the master should keep in mind that training animals is as much a matter of discipline for the master as it is for the pet, so that the master always deals the same way with the animal in a given situation. Just like a child, though, the pet will often test the boundaries, seeing if they can slip one by the master. Being consistent in how you deal with those situations is important in dealing with the animal.

Additionally, a good trainer is firm in discipline, but never harsh, never abusive. An abusive trainer is likely one day to become the meal for their pet, or at the very least the pet will leave them. Sometimes an animal will bulk at its master's command, even talking back with a petulant chirp, disappointed groan, or quiet assenting growl. These can make for light-hearted and fun moments.

Be sure to roleplay that you feed your pet and keep them clean and happy. This demonstrates that you care about, and appreciate your animal, and that you have a relationship with them and take care of them. Of course, you don't have to get cuddly with the other player to do that. As an exception to the roleplaying rule above, you can simply state "After we set up camp, I play with Kiara in the field," or "I sit with Linel on my shoulder at the table, giving him tasty morsels from my plate," or "I sit and pet Grendel while we wait." The person playing the pet does not need to express what the animal is doing when playing, being cleaned, or eating. It is simply assumed that the pet is enjoying the activity.

ANIMAL COMBAT

There's also the matter of performing battles. A pet doesn't just battle because it's there. It battles for a specific reason, usually to protect its master or else to attack in behalf of its master. You shouldn't get too graphic in such a fight, but you should be clear about what the animal's actions are.

EXAMPLE: "Sensing the tension, I prepare for battle"..."The second the battle breaks out, I lunge for the angry-looking Gorlian, going straight for the jugular."..."I get back up and strike again, this time with my claws swiping for flesh."

Animals in combat are vicious. If their adrenaline is pumping, you can be sure that all they want to do rip someone apart. However, adventure pets are well trained. They only attack as trained and will back off the second they're ordered, assuming that either the threat has been neutralized or that their master is retreating.

BATTLE RAGE - Like Yazirians, animals trained for battle have the Battle Rage special ability. As mentioned, battle animals are able to back off the second they are ordered to do so, despite their rage.

CYBERNETICS AND GENETIC ALTERATIONS

Pets, particularly mounts, can have the same implants, cybernetic parts, or genetic alterations that any other being can have. However, full grown non-sentient animals do not take to cybernetic or genetic alterations well and it could end up putting the animal in shock. Consider cybernetics and genetics rejection rules with an additional -10 circumstance modifier before adding cybernetic or genetic parts to an already existing adventure pet, unless it is already accustomed to receiving new cybernetic parts. Implants have no negative effect on animals.

ADVENTURE PETS!

Now that you know how to roleplay adventure pets and know the basic rules regarding them, it's time to choose your pet! You can choose from the following list or work with your Referee to come up with an adventure pet you like.

You will notice some deviations in the following animal stats from normal animal stats. The IM, RS, and Stamina stats have been made variable. The word "standard" refers to making a roll on the character stat conversion table. The Number is still provided as a matter of how many will be seen in their natural environment.

Che (Feline)	
TYPE:	Small carnivore
NUMBER:	1-20
MOVE:	Medium
IM/RS:	*/Standard +10
STAMINA:	1d10+10
ATTACK:	45
DAMAGE:	2d10 bite and claw
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	None
NATIVE WORLD:	Gollywog
DESCRIPTION: Self-possessed and unconcerned. Will not follow direct requests from even their own master, but will fulfill their master's desires as long as it is not posed as a request or command.	

Fazer Wolf (Battle Primate)	
TYPE:	Medium semi-intelligent carnivore
NUMBER:	1-10
MOVE:	Fast
IM/RS:	*/Standard +5
STAMINA:	Standard +10
ATTACK:	55
DAMAGE:	5d10 bite and claw
SPECIAL ATTACK:	Faze field (5 rounds/hour): 70, 5d10/round
SPECIAL DEFENSE:	Faze field (5 rounds/hour): Reduces damage from PGS weapons by 20% and Beam weapons by 40%.
NATIVE WORLD:	Hargut
DESCRIPTION: The fazer wolf is a white furred primate with small clawed hands like paws, with a long tail and a feline disposition. This exotic creature is often used for fighting and causing confusion.	

Gooligott (Mount)	
TYPE:	Large herbivore
NUMBER:	5-30
MOVE:	Medium
IM/RS:	*/Standard -10
STAMINA:	6d10+100
ATTACK:	40
DAMAGE:	4d10 trample
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	Immune to needle weapons
NATIVE WORLD:	Ifshna
DESCRIPTION: Often used as beasts of burden, these very ugly creatures were used for millennia by Ifshnits in the mountains of Ifshna, and even in plowing on their high planes.	

Kakra (Battle Hawk)	
TYPE:	Small carnivore
NUMBER:	1-2
MOVE:	Very fast (Fly)
IM/RS:	*/Standard +10
STAMINA:	1d10+5
ATTACK:	65
DAMAGE:	2d10 peck and claw
SPECIAL ATTACK:	Diving attack
SPECIAL DEFENSE:	None
NATIVE WORLD:	Rupert's Hole
DESCRIPTION: Bird of prey with 2m wing span used as both a battle companion and a messenger. It has a dark blue beak that fades to a red tip and has blue feathers, randomly striped with white and black with a red crest.	

Lanka (Feline Battle Mount)	
TYPE:	Large carnivore
NUMBER:	1-10
MOVE:	Very fast
IM/RS:	*/Standard +5
STAMINA:	3d10+170
ATTACK:	60
DAMAGE:	6d10+5 bite and claw
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	None
NATIVE WORLD:	Gollywog
DESCRIPTION: A lanka is a very large Cat with powerful forward legs used as a mount. Its powerful front legs give it an intimidating gate and made for powerful weapons. Its large kanines give additional substantial damage.	

Loper (Lizard Battle Mount)

TYPE:	Large carnivore
NUMBER:	1-10
MOVE:	Fast
IM/RS:	*/Standard
STAMINA:	5d10+250
ATTACK:	40
DAMAGE:	4d10
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	Immune to needle weapons
NATIVE WORLD:	Volturnus

DESCRIPTION: Dinosaur-like lizard used as Ul-Mor cavalry mount. The Ul-Mor communicate with the Loper using telepathy, but they may also be trained without telepathic linking. Lopers come in colors from tan to green and may be unmarked or have mild mottling or striping.

Mauler Hound (Battle Dog)

TYPE:	Medium carnivore
NUMBER:	1-10
MOVE:	Fast
IM/RS:	*/Standard
STAMINA:	Standard +5
ATTACK:	55
DAMAGE:	5d10
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	None
NATIVE WORLD:	Triad

DESCRIPTION: A hunting and guard dog often used to capture and kill. These highly self-controlled dogs don't make a move unless their masters tell them. They are loyal to the point of death. If their masters die, they die. They are 1.2 meters tall from the front paw to the top of the head and have short, satiny, dark brown hair all over their bodies.

Meket (Primate)

TYPE:	Small semi-intelligent herbivore
NUMBER:	1-20
MOVE:	Medium
IM/RS:	*/Standard
STAMINA:	1d10+10
ATTACK:	40
DAMAGE:	1d5 bite
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	None
NATIVE WORLD:	Hentz

DESCRIPTION: Flying squirrel-like monkey. This natural spy steals and hordes trinkets and is a general mischief-maker. The meket has reddish-brown fur with cream-colored tufts on its cheeks and crest. They are generally identified by the darker portions of their fur.

Pinar's Ant (Vespoidal Mount)

TYPE:	Large Omnivore
NUMBER:	5-100
MOVE:	Very Fast
IM/RS:	*/Standard +30
STAMINA:	Standard +50
ATTACK:	40
DAMAGE:	2d10 bite
SPECIAL ATTACK:	None
SPECIAL DEFENSE:	Immune to needle weapons; +20 defense against projectile, gyrojet, and melee weapons.
NATIVE WORLD:	Kdikit

DESCRIPTION: A large black ant capable of climbing relatively flat, but porous surfaces. Pinar's ant suffers no encumbrance penalties and is not affected by dry terrain of any kind.

Sand Eel

TYPE:	Small semi-intelligent carnivore
NUMBER:	1-5
MOVE:	Slow
IM/RS:	*/Standard -5
STAMINA:	1d10+20
ATTACK:	None
DAMAGE:	See Special Attack
SPECIAL ATTACK:	Electrical bite, high heat gas
SPECIAL DEFENSE:	None
NATIVE WORLD:	Morgain's World

DESCRIPTION: 1m long eel can grip a character's arm with its body while the character moves, and smart enough to follow direction. Vicious electrical bite and releases explosive gas from its tail. Though unable to learn body speak, the sand eel is capable of understanding complex verbal commands when the character uses the communication skill.

Zeridactyl (Battle Pterosaur Mount)

TYPE:	Large semi-intelligent carnivore
NUMBER:	1-2
MOVE:	Slow (Walk), fast (Fly)
IM/RS:	*/Standard
STAMINA:	5d10+200
ATTACK:	45
DAMAGE:	6d10 bite and claw
SPECIAL ATTACK:	Drop objects
SPECIAL DEFENSE:	None
NATIVE WORLD:	Volturnus

DESCRIPTION: The zeridactyl has a milder disposition than its frightening exterior would suggest. However, it is protective of its rider and battles like a valiant warrior.

ADVENTURE PET EQUIPMENT

Now that you have chosen your pet, you will need equipment and supplies for your pet. You didn't think you could just choose a pet and go without considering your responsibilities, did you? Of course not. Pets cost money and time to keep fed and clean, and if you want to ride one without yanking it's hair, you will need a saddle and other supplies. So choose your supplies and get ready for a life of adventure with your new pet.

FOOD AND CLEANING SUPPLIES

For the regular maintenance of your animal, you will deduct from your adventure income. Your pet will need food, scoop, waste disposal equipment, brush, and bathing materials. Below are the costs of supporting your pet based on its size. This also provides an average encumbrance to any vehicle or backpack in which the supplies are stored.

Pet Size	Cost/Month	Mass
Tiny	50Cr	5kg
Small	150 Cr	10kg
Medium	300 Cr	30kg
Large	600 Cr	60kg
Huge	1200 Cr	120kg

COLLAR

Collars can indicate that an animal has an owner and is a great way to accessorize your pet.

Item	Cost	Mass
Collar (Small)	5 Cr	0kg
Collar (Medium)	10Cr	0kg

LICENSING

In most civilized parts of the frontier, your animal must be licensed. Your animal's license is contained in a tracking chip implanted beneath the skin. If your animal performs a threatening and non-protective act, the master will be fined. If the animal acted of its own accord (untrained and without permission), it may be put down.

Item	Cost	Mass
Tracking Implant	50Cr	0kg

HARNESS

If you ride your animal, you must have a harness or suffer a -5 penalty to ride.

Item	Cost	Mass
Harness (Small)	15Cr	0kg
Harness (Medium)	30Cr	2kg
Harness (Large)	60Cr	4kg
Harness (Huge)	120Cr	8kg

SADDLE

If you ride your animal, you must have a saddle or suffer a -5 penalty to ride.

Item	Cost	Mass
Saddle (Medium Mount)	150Cr	10kg
Saddle (Large Mount)	300Cr	15kg
Saddle (Huge Mount)	600Cr	20kg

Item	Cost	Mass
Saddle Bags (2 pouches, Medium Mount)	30Cr	2kg
Saddle Bags (2 pouches, Large Mount)	60Cr	5kg
Saddle Bags (4 pouches, Huge Mount)	200Cr	13kg

PARKA

Hairy (Furry) animals may require a parka to help keep them from musting up and to minimize encumbrance from water retention in the hair.

Item	Cost	Mass
Parka (Medium)	10Cr	1kg
Parka (Large)	20Cr	2kg
Parka (Huge)	30Cr	3kg

TALON GUARD

Birds of prey have razor-sharp claws. To keep the bird from damaging its master, the master should wear a talon guard.

Item	Cost	Mass
Talon guard	25Cr	1kg

ANIMAL TRAINER SKILL SET

Taming, training, riding, and stabling animals are all important part of having pets in the campaign. If those skills aren't available, it's hard to keep animals from going wild. So below is a skill set with a list of sub-skills useful for taming animals.

An animal trainer (from the Biosocial PSA) can *Analyze Animal Behavior* and *Analyze Ecosystems* to understand an animal's needs and its environment and what it is attempting to communicate. The trainer is proficient in *Animal Taming* to provide discipline and structure to an animal's dealings with its master. With the *Body Speak* and *Communication skills*, an animal trainer is capable of communicating with an animal in surprising ways. And being a lover of animals, an animal trainer must always know how to *Ride Mounts*.

The communication skill can be found in your Alpha Dawn rulebook, while the following skills are only found in Zebulon's guide, with some tweaks. Animal Taming combines the Animal Taming, Animal Training, and Stable Mounts skills together. To have a Veterinarian, simply choose Medic as your other skill set upon creation.

ANALYZE ANIMAL BEHAVIOR

Success Rate: 20%
Level Bonus: +10
Prerequisites: None

A character with this skill can, if given four turns of observation, make an analysis of whether an animal is aggressive or harmless. Further observations, for 1d10 hours, can also inform the character of whether an animal's den or lair is nearby and what its eating, drinking, and other habits are. For a complete analysis of a creature and how it fits into its surrounding environment, the character would have to use the Analyze Ecosystems skill.

ANIMAL TRAINING
Success Rate: 10%
Level Bonus: +10
Prerequisites: Animals: Analyze Behavior 2, Animals: Ride Mount 3

A character with this skill knows the proper case, feeding, and stabling of mounts. In addition, he knows the best way to hobble or protect mounts during times of sudden danger (dust storms, thunderstorms, blizzards, etc.).

This skill gives a character the chance to tame a wild animal. Once tamed the animal can only be used as a beast of burden or herd animal, unless the Animal Training skill is used to make it a pet or companion. Some types of creatures are more difficult to train than others. The following creatures have a -10 modifier to the skill check: all tiny creatures, giant herbivores, all insectivores, large omnivores and carnivores. Giant omnivores and carnivores require a -20 modifier. Monsters, particularly vicious creatures, or Sathar-developed creatures, cannot be tamed. Examples of monsters would be sand sharks, queequeg, and slither, all included in the Star Frontiers Expanded Rules.

Taming a creature can be time consuming and dangerous. The time required depends on its size and type and is left to the referee's discretion. If a character fails the skill check he must roll 1d100, 01-25 means that the creature attacks the character attempting to tame it.

A character failing a skill check may try again on the same creature after a suitable period of time has elapsed, with a +10 bonus, -10 if the creature tried to attack the character). Once three skill checks have been missed on the same creature, it is considered untamable.

Taming a creature requires the character with the Animal Taming skill to work with the animal day after day. If he misses more than two days of taming time, the creature returns to its original state. Once tamed, however, an animal remains so unless abandoned. Just because a creature is tamed does not mean it does not require a cage, pen, or corral; it simply means that the creature will not typically attack unless unusually provoked.

A character making a successful check with this skill can train a tamed animal. Training includes teaching an animal to carry a rider and obey riding commands, to guard a location and only allow known characters to pass, or to follow a command word. Commands are simple instructions such as "fetch," "attack," "return," etc. and simple nouns, like weapon, Vrusk, box, etc. Teaching an animal requires days, sometimes weeks, of work. The time required depends on the intelligence of the animal and what is being taught.

BODY SPEAK
Success Rate: 100%
Prerequisites: None
Base Ability: LOG

This skill allows a character to use exaggerated body movement as a form of communication with others possessing this skill. It is most useful when the characters wish to communicate while keeping completely silent (as in laying an ambush) or at a distance where even shouting cannot be heard but radio silence is desirable. Simple phrases can be used, like "go... city... fetch... doctor." Only characters with Body Speak can understand it. Since body speak uses universal symbols, anyone with the skill can understand anyone else using it. It is sometimes used in diplomatic exchanges until a proper translator can be found.

Every pet has the ability to understand repetitive commands from their master, including simple commands like "sit", "lay down", "go on", "stay", etc. Semi-intelligent creatures, like primates, can learn rudimentary forms of sign language, making them capable of interacting with their master on a much higher level. Most semi-intelligent pets are considered to have the Body Speak skill. Where a semi-intelligent animal is unable to learn body speak, they are more adept at understanding verbal communication.

RIDE MOUNT
Success Rate: 70%
Level Bonus: +10
Prerequisites: None

This skill allows a character to ride a tamed animal trained to carry a rider. The only time a skill check is needed is when a character first tries to mount a new species, when a difficult maneuver is performed, or when a mount is spooked or feels endangered. A character gets two chances to ride a new species of mount. Once his skill check is successful, the character can ride any mount of that species any time. If a character fails both checks, he must wait at least a year or campaign time before he can try to ride that species again.

If a mount is frightened or is directed in a path that it feels is too threatening (jumping a chasm, narrow ledge of a canyon, etc.), the rider may have to make a check to maintain control over it. The result area needed by the check depends on the circumstances and is at the discretion of the Referee.

BASICALLY SPEAKING

By Shadow Shack

MISSION 1: KIDNAPPERS!

Editor's note: Shadow Shack has been working on a project to merge the Alpha Dawn Basic rule set with the Expanded version making a fun, fast playing system. This new rule set has been put to the test in the Gameroom. Come join us for some Star Frontier role-playing goodness!
Basic Plus project -
        http://starfrontiers.us/node/2158
Gameroom - http://starfrontiers.us/gameroom

GAME SUMMARY

Johann Schmidt (mH), Slade Lockjaw (mH), and Tichat-Ka (mV) signed on with the Clarion Royal Marines and graduated basic training together. Johann had a past career as an EMT but found himself constantly in trouble, Slade was a holo-journalist from Dramune who had an uncanny knack for hurling things with accuracy, and the vruskan Tichat-Ka served as a troubleshooter with a sense of humor that could be linked with dralasites. The motley trio didn't seem like the types that would meld well, but they found camaraderie during their training period. Upon completion they were immediately given the entry rank of Crewman and subsequently assigned as boarding crew for the CMS Falcon, a Liberty class assault scout in the local militia staffed by the Marines.

It didn't take them long to find the action they were searching for. On their first time out together, the Falcon was diverted from what should have been a normal inspection routine on the inbound freighter SS Dark Shadow (which was summarily assigned to the CMS Osprey, another assault scout patrolling the space lanes of White Light). As it turned out, Princess Leotia Valentine XX had been abducted by unknown assailants and forced into a shuttlecraft on the surface of Clarion. The shuttle was seen docking with the SS Stothgard, a Timeon Clipper class freighter, which departed Clarion Station without clearance. Once local authorities put two and two together, it was apparent that the vessel was operating under the Clarion Liberation Party.

Clarion Station Flight Control tracked the Stothgard and ordered the nearest Royal Marine vessel, the CMS Falcon, to investigate. Lieutenant Vincent Shirrah, Commanding Officer of the Falcon, immediately jumped into action. Not the typical dull day he'd been anticipating, but this is what he had been trained for all those years ago. He briefed the rest of his crew en

route, eventually acquiring the Stothgard on radar. The ship did not answer any of the hailing frequencies that Executive Officer Jr. Lieutenant Rollie McMickels had been trying. McMickles called this in to Clarion Flight Control to confirm the permitted use of force. Finally the Falcon received a reply, albeit not quite the kind they were seeking: a searing laser blast came within centimeters of taking out the Falcon's beak!

Mishipman Bluto Goorhud was ordered to take out the Stothgard's drives and weaponry. Bluto was the newest crewmember to be assigned an officer position, but he wasn't the naive one in the combat arena. He efficiently dispatched the Timeon Clipper class vessel's single laser weapon in short order, only requiring two passes to do so. The third pass yielded a direct hit on the craft's drive system, shutting it down. Shirrah maneuvered the Falcon in between the clipper's twin holds to attach itself to their airlock. Time to get down and dirty...

Bluto was ordered to meet the boarding party in the Falcon's loading deck. The loading deck is the stern-most deck on a Liberty class assault scout, with the airlock is located just aft (below) of it. Bluto fired up the laser powertorch and cut into the clipper's outer hull hatch in no time. Then he moved inward and checked the atmospheric gauges within: 100% atmosphere on the inside. He cut into the inner hatch and soon access was granted for the boarding party. He led them in, and they encountered their first wave of resistance: a pair of security robots to challenge the might of Bluto and his new boarding party: Johann, Slade, and Tichat-Ka.

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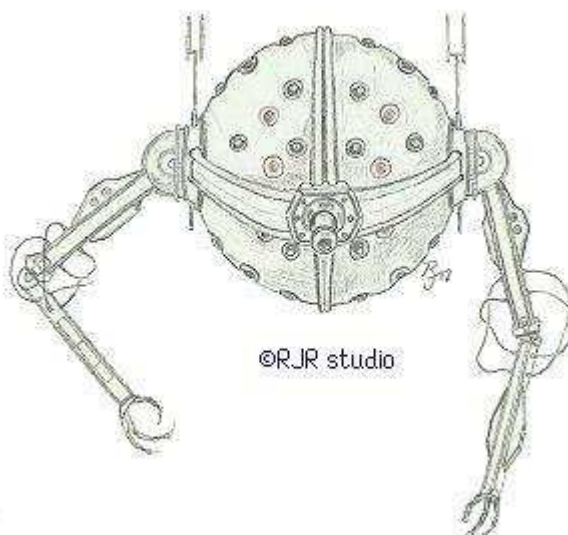
A battle erupted immediately. Slade took a good hit that knocked him to the deck momentarily. But the robots were overcome by the Falcon's boarding party and they were soon reduced to smoking toasters. Slade and Johann each helped themselves to the 'bots' weapons, a pair of laser rifles each sporting a slightly used powerpack. Bluto called the elevator car down for disabling as the others began searching the deck. This was obviously a crew deck as was apparent by four unmade but obviously used cabins and a fresher/sanitation unit, along with a small galley and common area. The elevator car arrived and Slade smashed the control panel. Tichat-Ka followed up by ensuring that it wouldn't be functioning for a while. The upper maintenance door was opened and one by one the Falcon boarders scurried up into the shaft.

They found a ladder running up the length of the shaft and could see the elevator doors to each deck above, one situated 10 meters above them, the next another 60 meters up, and a thrid & final set 10 meters higher. They climbed up to the first set, and pried the doors apart. As they figured, they found themselves staring into the forward hold. It was empty save for some leftover debris from prior loads, and Johann grabbed a piece to keep the doors from closing behind them. They ascended upwards to the next set of doors and could hear faint commotion beyond.

Slade maneuvered himself above the door with two doze grenades handy while Johann pried open the doors. When the doors opened, Slade hurled both dozers which found their marks, efficiently sending half of the baddies into slumberland. Tichat-ka and Johann lit up the other two mooks with laser fire and gyrojets. The opposition returned fire with little effect. Slade

swooped into the door with his laser rifle blazing and was joined by his comrades, the skirmish was short and one sided. As the others filed into the deck, they heard the sound of something metallic moving behind them. The deck layout was similar in design to the first crew deck which they entered the ship, with the elevator shaft centered in a cylinder-like area encircled by a curving wall with five doors spaced around.

The metallic sound reverberated along with several servo motors whining in harmony, and while it sounded like it was originating beyond the elevator shaft in the recess they couldn't immediately see into, it also appeared to be stationary as well. Slade whispered out, "Tichat-Ka and I will go left, Johann and Bluto go right, slowly boys."

Both groups eased around the shaft, nerves and muscles tightened and ready for anything. Simultaneously arriving into the unseen niche, they found themselves poking weapon barrels at a stationary robot that didn't immediately appear to take notice of them. Its head unit rotated slowly to its left to face Slade and Tichat-Ka, followed by some electronic warbling, and then rotated right to repeat this with Bluto and Johann. Beyond what appeared to be a scanning mode, it did nothing.

Bluto noticed the robot was positioned to face a door directly across the way. Sein ghtis he said to the group, "Guardian 'bot. It'll probably just sit here until we either attempt to manipulate it, attack, or enter the door that it's watching." Slade decides to attempt a point blank maneuver to immobilize the robot. The plan was for he and Bluto to stuff tangler grenades into its visual receptors in order to blind it and then proceed

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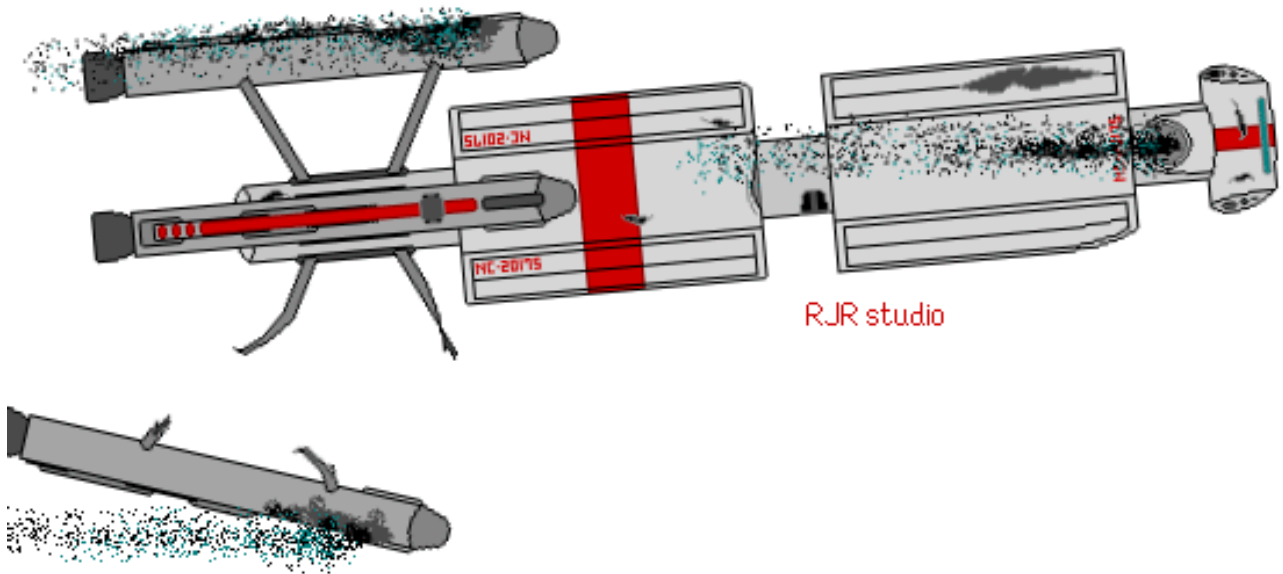
with an attack pattern.

At this point Johann opts to section off some of his rope to incapacitate the two unconscious guards. After all, he didn't want any unwelcome surprises from behind later on! Meanwhile Bluto and Slade readied themselves for the maneuver. Nodding, the two simultaneously pulled pins and stuffed the tanglers toward the robot's face.

Surprisingly, the maneuver doesn't work at all. The robot leaps into action in a blur, crossing the hall to block the door while simultaneously firing at the group with its automatic pistol. The burst goes wide and sends steel rain over Johann's head. Johann drops prone and the group returns fire, all working in tandem to defeat the metallic menace.

Several of them push the beast away from the door, kicking its loose weapons away as well. Johann continues to bind the unconscious guards while Tichat-Ka collects their ammunition. One never knows how much they'll need, and it's better to have too much than not enough! Slade presses an ear against the door and hears a faint yet muffled voice, followed by two distinct sets of footsteps and a gruff but inaudible reply. The other two regroup, Slade and Johann take point as Bluto and Tichat-Ka cover the sides of the door.

Tichat-Ka slides the door open, and a yazirian and dralasite within leap into action. A bound and gagged female human can be seen in a bunk off to the right as the duo rush the door. Slade and Johann cut loose with their newly acquired laser rifles. Both miss and the targets press forward. They make it to the doorway and go for point blank gunshots. The yazirian goon sticks his laser pistol towards Slade's abdomen and blasts away. Slade twists just enough that the beam misses by millimeters. The dralasite goon shoves his automatic pistol into Johann's face and squeezes, only to hear the sound of...silence. A jam, how fortuitous!

Slade returns the favor with his laser rifle and

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dispatches the yazirian thug. Johann wounds the dralasite with a second laser blast. The dralasite swipes his stunstick at Bluto nearby and tags him, but the stun setting has no effect. Bluto responds with his electric sword and connects with a clean hit that sends the goon into dralasitic afterlife.

Catching their breath, the quartet peers into the room. The bound female form within twitches slightly, and all of them recognize her as Princess Leotia Valentine XX of the Clarion Royal Family! "Untie her," Bluto barks out. Slade slings his rifle and rushes in to remove the bindings. "Clarion Royal Marines, your highness," Slade calls out softly as he unties her. "Are you alright?" Leotia rights herself and stretches, joints aching from the awkward position she had been in. "Thank the stars, "she answers. "Your promptness is appreciated."

Bluto taps his chronocom, raising Lieutenant Shirrah. "Midshipman Goorhud here, prize recovered. Returning with prize immediately." He turns to the other three. "Secure this deck, I will return in ten minutes." He assists the princes into the elevator shaft and both soon disappear within.

Johann and Tichat-Ka search the other cabins in the meantime, as Slade takes watch. Nothing else is found, the other three cabins were vacant but otherwise showing signs of use. Bluto returned in the alloted ten minutes, crawling out of the elevator shaft. "Okay boys, are ya ready to mop up?" The assembled trio respond and Bluto finishes. "Alright, back into the shaft Marines. Time to take the bridge!"

Scooting up the shaft to arrive at the uppermost doors, the foursome can hear activity beyond the closed doors. They pick out four voices, all shouting out to each other indistinctly. Johann whispers to the group, "Same course of action?" The others nod in agreement, after which Slade whispers back "Someone gimme a dozer!"

Tichat-Ka maneuvers to the top and jimmies the doors open. Johann & Slade toss the obloids in and they find their marks, popping at the feet of a female yazirian and a female vrusk respectively. Both inhale the sleep gas and slump to the deck. Tichat-Ka drops in and bolts left, swatting at a female human with his stunstick but only catching air. Bltuo pops up from below and arcs a laser beam across the bridge at a male human, just missing his head and causing a small sparkfire behind.

Both react by jerking pistols from their holsters, and there is a moment of hesitation. Slade shouts out "Surrender and live, resist and die!" Johann reinforces the command with a raised laser rifle. Tichat-Ka raises the stunstick for another swing while cocking his head to one side, as if sizing up his opponent. "Nice pants," he says to the female human waving the electric baton. Bluto crawls out of the shaft to level his laser pistol. The opposing duo toss their sidearms to the deck, and slowly raise their hands upward. "Wise move," Bluto retorts. Johann begins measuring out 1-2 meter sections of rope.

The informal briefing the boarding party received prior to entering the Stothgard listed its owner as one Captain Chaison Masting, a male human that has alleged ties with the Clarion Liberation Party. Turning to the male human, Slade calls out "Chaison Masting, I presume?" the human nods. Bluto snorts out "By the authority of the Clarion Royal Marines, you are hereby under arrest for kidnapping a member of the Royal Family and subsequently treason against Clarion's government."

As if in reply, a bellowing voice comes over the intercomm panel near the female human. "What's going on up there? I need those reports you dizzy dame. I can't fix these drives on just my good looks, charm, and grace!" Johann pauses while binding the female human, and looks toward the captain. "How many crew are aboard this boat?" Tichat-Ka scurries over to the mainframe computer. "Answer him!" Slade commands.

Tichat-Ka's evenly spaced vruskan fingers begin to dance across the keyboard. The captain, clasping his hands atop his head, calls out "Just us four on the bridge, six on the fore crew deck, one more in engineering, and three robots. That's it, I swear!" Tichat-Ka looks up from the monitor and nods in confirmation. "Ship's log backs that up."

Tichat-Ka's fingers continue the graceful keyboard jitterbug, and he raises one of his forelegs to prop open a drawer underneath. One hand darts away from the keyboard and returns with a datacube. The vrusk places the cube within his mandibles and continues to peck the keys, and soon he retrieves the hexahedron and attaches it to a databank port.

Meanwhile Johann has bound all four crewmembers, both conscious and sleepers alike. "Watcha got there, Tichat-Ka?" Bluto calls out. The vrusk disconnects the datacube and pockets it. "Everything we need," he responds. Bluto grins. "Okay people, double time. Everyone grab a crew member and into the shaft." He clicks his chronocom and raises the C.O. once more. "Midshipman Goorhud to Falcon, returning with four prisoners. We still got one more live one roaming the lower decks, we'll pick him up and two others that are stashed away after the drop. Repeat, four comin' down!"

One by one the Falcon boarding team members re-entered the shaft, Johann carrying the unconscious female yazirian and Slade escorting the bound female human. Tichat-Ka began lugging the unconscious female vrusk and Bluto gave Captain Masting a hearty shove toward the opening. As Slade entered, he asked Bluto "How can the bound ones move down the opening?" Bluto grinned slyly and offered "Not my problem," as he violently shoved Masting into the opening.

Moments later the quartet found themselves back in the elevator on the mid crew deck, slipping into the car one by one and lowering prisoners one step closer toward their final destination. Working their way back to the main airlock, Lieutenant Shirrah greets them along with the ship's dralasitic astrogator, Jr. Lieutenant Dugknar. "Well done," Shirrah says to the boarding party. As Dugknar begins herding them into the storage locker on the loading deck, Tichat-Ka hands the data cube over to Shirrah. "What do we have here?" The C.O. inquires. Tichat-Ka cocks his head to one side and says "Computer data on the crew, and more importantly details of the abduction dating back to several months ago." Shirrah smiles brightly. "Impressive. Remind me to commend the training program director, these recruits just keep getting better."

Bluto waits for the right moment and interjects. "Sir, with your permission there's one more straggler aboard the Stothgard. The chief engineer we suspect, holed up on one of the lower decks." Shirrah nods. "Have at it, Midshipman Goorhud." Bluto leads the three back into the freighter, grabbing the laser powertorch along the way. "We'll need ol' Gutter here to get through the elevator floor."

The quartet arrives back at the elevator. Bluto starts hacking into the floor of the elevator car, melting through it like a hot laser through Gran Quiveran gelatin spread. Tossing the torch aside, the four pile into the shaft once more. The shaft stretches down about 80 meters, terminating at two sets of doors: one 70 meters down and the bottom-out point 10 meters further.

The group collects themselves at the first set 70 meters down. Preparing for the inevitable, Tichat-Ka once again forces the doors open as Johann & Slade ready

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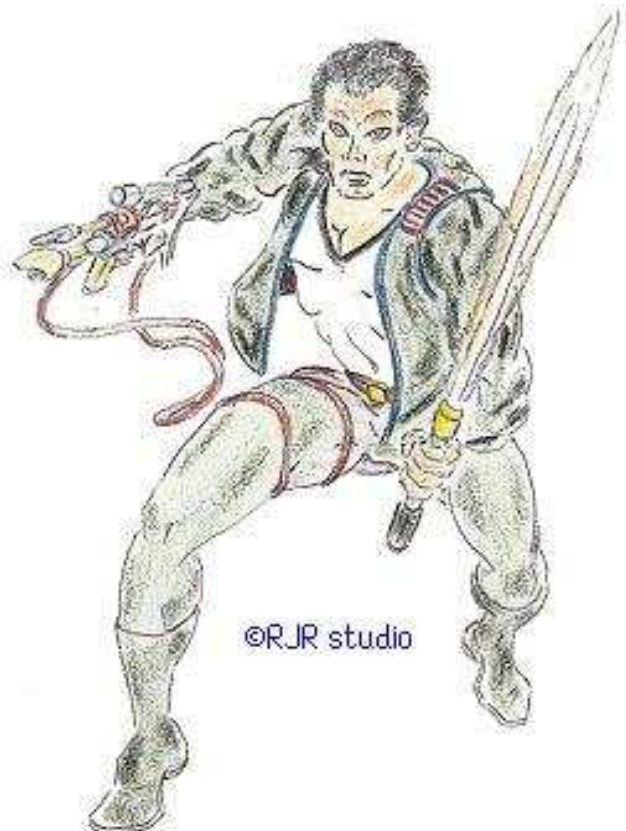
their weapons. The doors slide open to reveal the aft hold, vacant save for a few crates labelled "FOODSTUFFS" and "WATER". Slade begins inspecting them for their actual contents as Tichat-Ka locates an intercom speaker/mike adjacent to the elevator doors. In Pan-Galactic Common, he rattles off into the microphone "Clarion Royal Marines to whomever remains in the maintenance deck. We have taken your craft and crew, surrender peacefully and make it easy on all of us."

A voice bellows back, "Joke's on you guys, I'm not buyin' it!" Bluto calls Shirrah on the chronocom. "Sir, if possible can you get Captain Masting to divulge the Stothgard chronocom frequency and order his engineer to surrender?" A brief pause is followed by Shirrah's response. "Copy that boarding party. It's worth a shot."

Johann scurries down the chute to arrive at the final set of doors, and can sense activity beyond. Slade, satisfied that the crates are legitimate, joins him. A few more minutes pas and the chronocom crackles to life. Captain Masting's voice can be heard, "Chief Engineer Grotter, this is Captain Chaison Masting. Game's over, old friend. The Royal pain in our butt marines have taken the ship."

A brief pause follows and a voice bellows back, "Alright, come and get me." Tichat-Ka scuttles down the shaft to join the other two, and pries the doors open as Johann & Slade raise their rifles. The doors open and a husky dralasite decked in grease stained coveralls turns to face them. He tosses a laser pistol to the deck and raises his pseudopods. Johann and Slade enter cautiously, surrounding the dralasite. "Don't move," Johann warns. "My friends are decent shots." The dralasite turns to face the doors. "Well c'mon already, I ain't got all day!"

Tichat-Ka enters, facing the dralasite with a pair of gyrojet pistols drawn. He cranes his neck, tilting it to one side, and looks down. "Nice shoes," he comments, looking back up at the dral's eyespots. "They even curl inward at the right angle." The dralasite bellows softly in laughter. Slade shakes his head, offering "You're an odd one, Tichat-Ka." Johann binds the drals pseudopods and guides him toward the shaft. "Let's go, cowboy."

They meet Bluto at the aft hold doors and the group moves back up to the elevator shaft to the disabled car. One by one they crawl up into the car and make their way back to the Falcon. Once the prisoner is turned over, Bluto orders the other three back into the ship to recover any weapons and useful items. Half an hour later the trio returns lugging enough to fill the ship's weapons locker. Shirrah orders all hands to their stations and prepares to disembark. The three new recruits make their way to the recreation deck and take travelling positions.

Soon afterwards, the Falcon disconnects from the drifting hulk and fires RCS thrusters to maneuver away from the twin holds. Once the craft pitched about, the main drives fired and gravity soon returned as the ship reached 1G acceleration. Several hours later Princess Leotia Valentine XX entered the rec deck to greet the new recruits, escorted by Midshipman Goorhud. "Thank you again, " she offers. "A banquet will be held in your honor, brave and noble Marines. You have earned the respect of the Royal Family as outstanding members of Clarion.

The three of them looked at each other, and couldn't help but thinking the same thing: "Real food!" Survival rations and auto-galley meals just don't hold up to the real thing. Shortly afterwards, their newfound hunger was replaced by thoughts of the distinct possibility of a monetary reward as well...

AFTERMATH

During the banquet, it was learned that the Falcon crew was not the only group to see some action that day. The Marines' flagship frigate, the CMS Leo, delivered two vessels into impound. In addition to the Stothgard, the SS Dark Shadow was brought in after the boarding crew of the Osprey discovered contraband Streel-furnished firearms hidden within the robots that were being carried in the vessel's hold. As it turns out, the Falcon encountered both vessels...originally assigned to the Dark Shadow inspection and later detoured to the Stothgard. Between the captured crew members of both craft, it is theorized that this smuggled shipment was intended for factions of the Liberation Party. Both scout crews received commendations for their actions, with the higher honor going to the Falcon boarders who received the Royal Medal of Honor. Johann, Slade, and T'chat-Ka later returned to the Falcon and were greeted by Lt. Shirrah, who shook hands with each and handed them their official promotion plasticards and epilette pins denoting the rank of Corporal.
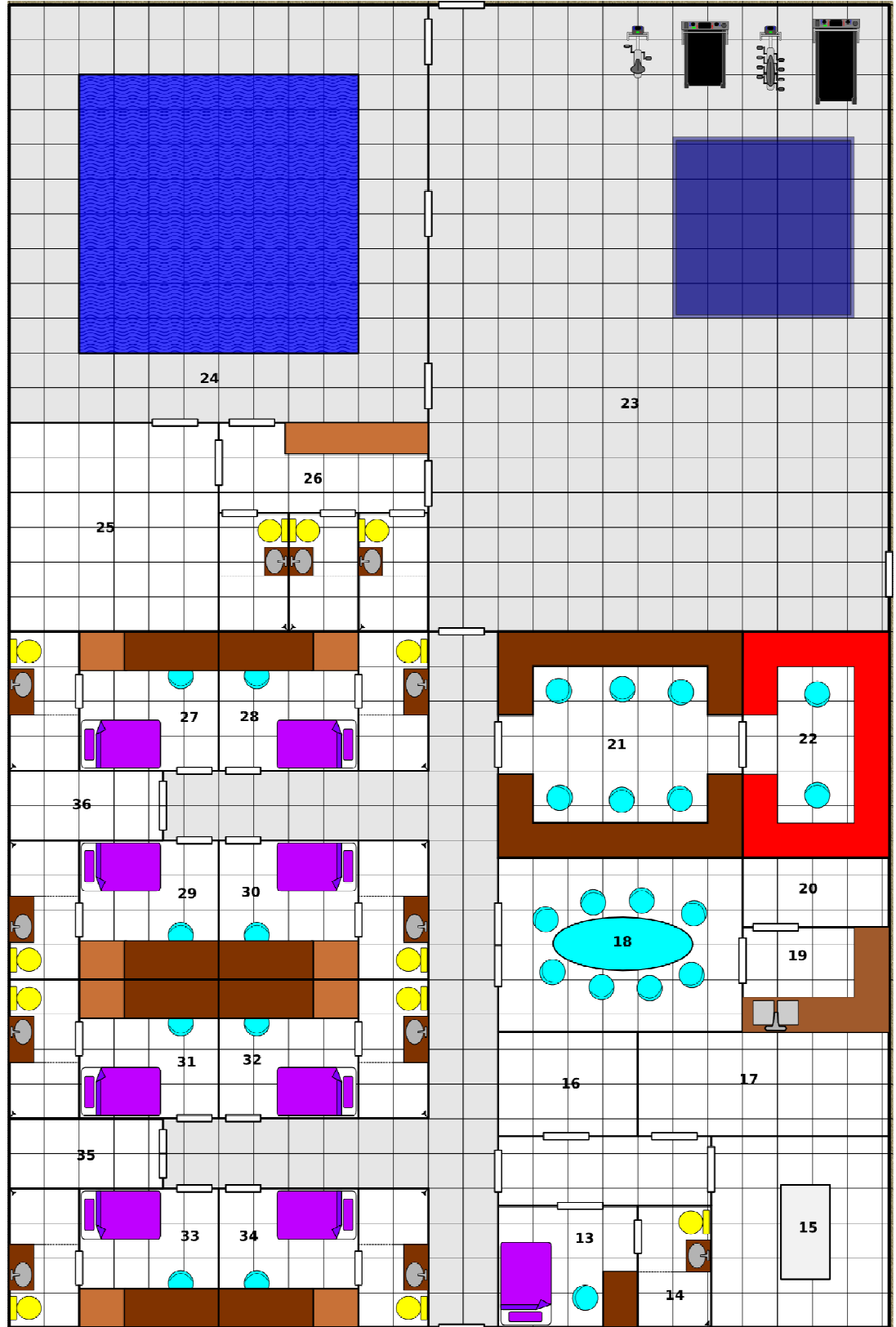

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RANDOM LOCATIONS

By Tom Stephens

A small office in the suburbs? A remote isolated outpost? A suite in a super sky scraper? What use can you find for this layout.

If you want to see what I used it for, drop on in to my ongoing game on The Star Frontiers Network website at http://starfrontiers.homelinux.net and check out the Obar Enterprises game in the forums.

While you're there check out the other games getting started as well.

Author's Note: Since this was lifted directly out of an exiting map with some other buildings on it, the numbering doesn't start at one.

SEPTEMBER 2008

CLASSIFIEDS

Prime 1 Mercs, Inc.

Truce Accepted

Groko,
Meet me in two weeks at the waterfront near "The Plasma Grill". Show up alone and unarmed. I promise you'll get what's coming to you.

                    --Tordia
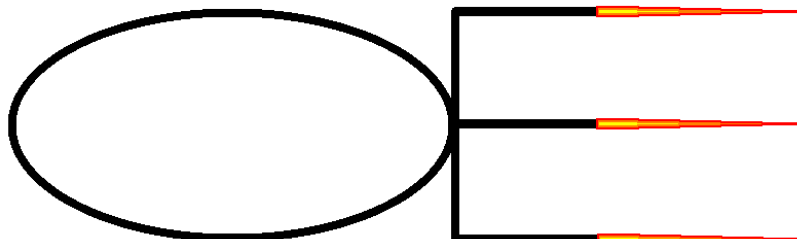
Bionical Engineering and the Robotic Prosthetic

For many eons now sentient beings have had a need or perhaps a desire to replace lost or severed limbs. In the early dawns of these beings rise in sentience these replacements were simple if not just down right crude, a wooden peg for a leg or a metal hook for a hand. As the beings became more knowledgeable about technology, the prosthetics became more elaborate, but still had minimal function. They had even become nearly cosmetically indistinguishable from a real limb (except for the lack of animation). Until Dr. Gleeb Lib, a robotics engineer, came up with the idea of using robotic limbs to replace severed ones. Gleeb took up studies and became a fine surgeon and started Gleeb Lib Prosthetics Inc., currently the leading manufacturer in bionics. He set up a lab and began his work on designing and building the first bionically engineered prosthetic.

His early models were functional if not wholly reliable. They were prone to servo motor burnout, excessive bearing wear and electrode deterioration. But Gleeb was determined to perfect the art of the bionical engineered prosthesis. Later models improved and today if one should purchase a bionical prosthetic from Gleeb Lib Prosthetics Inc., he or she can expect to get a 20 year warranty on parts and labor. One could expect to pay about 500 Cr per movable joint when purchasing a Bionical Prosthetic. For example, a human hand replacement would cost 8,000 Cr (three digits per finger and the wrist), a small price to pay when you think of the fact that it works as well as the original and they now come with pseudo-skin and/or synthetic hair in a variety of colors and textures suit any beings tastes.

Gleeb's latest endeavor is to find a suitable prosthesis for Dralasites, but their elasticity has proven a challenge. His most recent experiments have been using elastic polymers with a plasma base. His results have been promising, but not satisfactory.

You can contact Gleeb Lib Prosthetics, Inc. at 2121 Gleem Ave. Synthtown, Inner Reach Dramune. (Gleeb Lib Prosthetics, Inc. is in no way or form affiliated with SynthCorp).