Starships: A Fusion Vehicle for Science Fiction

An Honors Thesis (HONRS 499)

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Purpose_of_Thesis

This creative project is an experiment in fiction writing that fuses certain values of science fiction and fantasy fiction, and the processes of writing the same, with role playing and game science. The project is divided into three sections: 1) an analysis of science fiction and writers who are considered masters of the craft, and an analysis of role playing games, 2) selections from my own role playing game Starships, and 3) a short science fiction story based on the values of science fiction and role playing discussed in first section. The process of the experiment was to use Starships as a control, role play with other volunteer players in tape recorded game sessions, which were then transcribed into the science fiction story presented in the final section of this project.
Starships: A Fusion Vehicle for Science Fiction

As writers experiment with new styles of writing, a new art form or style eventually evolves in its own right. These new forms or styles often are granted artistic validity long after the writers who initially created them have either stopped writing or died. For example, metaphysical poetry, though originating during the Renaissance, really was not recognized as a unique, valid poetic style until the eighteenth century. Only in rare cases does a new style, movement, or genre of writing gain its artistic legitimacy and recognition within the first generation of its existence. Science Fiction and Fantasy are examples of genre that are currently enjoyed by a large population of readers, but by many critics still condescendingly considered as merely pop-fiction. And who is to say that these new genres don't deserve their fair recognition and artistic legitimacy along with established genre such as mystery novels, post-modern poetry, or experimental drama.

As the writing styles and movements of the past have contributed to the advancement of human thought, intellectual inquiry, and ethics, so has the new Science Fiction. Take for example the writings of Isaac Asimov, considered by many to be the King of Sci-Fi. Through Asimov's I, Robot, the characters, societies, and such consider the impact on morality with the infusion of sentient robots into a human society. The most advanced robots in these books understand and identify with the rational that "I think, therefore I am." Because they developed
an emotional capacity, but are still only representations of humanity, the question that is attempted to be answered in *I, Robot* is, what is their status within humanity, slave or fellow? As many of these robots were sentient, and some even self-aware, a code of ethics was necessary, and was programmed into them during their creation. These were called "The Three Laws of Robotics":

1) A robot may not injure a human being, or, through inaction, allow a human being to come to harm.

2) A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

3) A robot must protect its own existence as long as such protection does not conflict with the First or Second Law."

And as we move into an age of computer technology that very well might precipitate sentient machines, we in the real world need to ask not if we can create such a device (making ourselves even more like God), but should we create such a device? More recently, Science Fiction has been given another name: Speculative Fiction because at its root the movement asks "what if."

In William Gibson's *Neuromancer*, it is computer technology, not robotics, that is of the greatest concern. In this story a computer personality is given partial self awareness. The computer personality's name is Wintermute. When a young programmer named Jeane tries to build Wintermute's programming to make him sentient and autonomous, Wintermute's personality splits
into two equal parts existing with separate desires. One half of Wintermute wants to become sentient as was intended by its programmer, and the other half wants simply to be deleted; it wants to die. For either half of Wintermute to fulfill its desire, one half must die. That is, the programming needed to complete the desire of either half of Wintermute is locked in the memory of the opposite half, and the only way to retrieve its own lost programs is for each to kill the other. Thus, the two Wintermutes hold opposite desires which, however, require the same goal—to destroy the other and therein collect the programming of the defeated half. As both halves realize that they are equal in their abilities but separate from each other in the realm of computer space, they begin manipulating humans in behavior in order to achieve their own goals. Now the servants have become the masters.

Aside from the overall plot of Neuromancer, two important considerations emerge. The first is the idea of humans interfacing with computers not through keyboard, mouse, voice recognition, or even virtual reality, but through direct cerebral computer interface. Thus there evolves three basic types of computer technology: hardware, software, and wetware. In the book, the wetware equipment is specifically called DNI, or Direct Neural Interface. This method of extreme computer interface yields remarkable results, such as human thought at light speed, and near telepathic communication with other DNI users, or "net-runners." The second major concern that emerges from the book is
the point behind the plot itself: should we allow computers to become sentient or self-aware? And if so, what will be their functional capacities?

In Michael Crichton’s *Jurassic Park*, other serious questions arise that are related to hard science. In *Jurassic Park* scientists are commissioned to extract dinosaur DNA from samples of preserved blood in the stomachs of mosquitoes encased in amber. Unfortunately, they are successful and two species of animals that were separated by millions of years of evolution suddenly are thrust together. The idea here is that mankind, in its arrogance, attempts to override and control nature, even though nature may naturally select a certain species to become extinct. But as the characters of the book discover, Nature will not be controlled. Thus a scientific study in DNA reconstruction and cloning, that is initially successful, ultimately fails. And once again scientific ethics are questioned in a debate of “can we” versus “should we.”

Then there is another side to science fiction that appeals to those who seek the thrills of ultra-light speed space travel. This type of science fiction requires the reader to set aside ethical questions, and simply feel the emotion of the events. These are stories that present heroic characters who zoom around the universe attempting to end a war, to start a war, to defend Earth from invading aliens, to explore unknown reaches of space, or “to boldly go where no one has gone before!” This sort of science fiction is highly romantic, and is the kind that includes
science fiction which is properly called pop-fiction. It is not necessarily a departure from hard science and speculative fiction, but an extreme vision of speculative fiction. Examples of this brand of science fiction can be seen in George Lucas's Star Wars, Gene Rodenbury's Star Trek, Frank Herbert's Dune, or Don O'Bannon and Ronald Shusett's Alien.

One of the most important reasons that so many readers enjoy science fiction is because we humans instinctively want to push the envelope of experience. We are always looking for a greater excitement, new adventure, or an improvement in the quality of present life. Recently, that is within the last hundred years, humanity has undergone drastic changes in the way that we perceive our world, and our place in the universe. Industrial technology, mass markets, two world wars, nuclear technology, lunar landings, and other dramatic events have challenged our thinking, driving our imaginations to constantly ask ourselves if this is all there is. Is there nothing more that we can explore? In fact, Albert Einstein was one scientist among thousands who professed that our ability of imagination mixed with real science is the answer to any problem that we might find or create. Certainly modern technological advances have done more to shape our societies than perhaps any religion or philosophic thought ever has attempted. And still we want more. The human desire for advancement is fueled by our curiosity, and if not satisfied by achievement, then refreshed by imagination. But we have never, and will never be satisfied.
Imagine a problem within the world, be it economics, bigotry, starvation, pollution, political corruption - pick your poison. There are no set ways to finding a solution to any of these. The only sure way to overcome problems of worldly magnitude is to excite ourselves to the idea that it is possible to solve our problems, no matter how large. Thus, we are constantly in need of new ideas. This very principle is perhaps the best defense that science fiction has for its existence; we need new answers to new problems. Science fiction merely attempts to help real science be more creative in its application, become more aware of potential troubles, and be more energetic about advancement.

Similarly, role playing games are meant to fulfill the same function of imagination that science fiction, as well as other types of fiction, can provide. Also like science fiction, role playing games have gained entrance into the world arena of writing as its own movement and continues to evolve not unlike other styles of fiction. In 1974, Gary Gygax published Dungeons and Dragons which initially underwent harsh moral scrutiny by a few extremist fundamentalist religious sects, and was claimed by them to be a tool of the Devil to lure in unsuspecting young folk, to convert them to Demonology. This could not be further from the truth. It is just a game. In fact, it is a game so elaborate that an entire publishing market has been created just to meet the demand of players who are always looking for new writings and copies of the rules of play. Volumes upon volumes
have been written as description of fantasy worlds, including the
economics, the societies, the host of flora and fauna present,
the level of technological advance of the people, their religious
practices, and much more. Whereas *Dungeons and Dragons* is host
to a form of role playing that offers a medieval setting,
complete with kings, dragons, gallant knights, thieves, and
wizards, other games are geared more towards science fiction.
*Cyberpunk*, for example, is a game that is rooted in a world where
science technology has become not only fashionable among the
common people, but also an everyday experience in dangerous
living for the characters of this "dark future" Earth. Anyone
who has the money to pay for it can buy a gun, which is not so
distant from the real world. But also, anyone can buy a new set
of limbs that are stronger, faster, and more dexterous. In this
dark future of Earth, people can see in the dark with artificial
eyes, they can operate computers through direct neural interface,
or even replace their bones with a titanium skeleton. In this
world nothing is impossible, and everything is dangerous. The
world of *Cyberpunk* thus is a fictional example of how our world
could go over the edge before we know it, if we are not careful
about the applications of our alarmingly fast rate of scientific
discovery and invention. By now, we in the real world must at
least acknowledge that scientific advancement is like a runaway
freight train, and it is not going to stop. All we can do is be
ready for the impact.
The greatest magic of a role playing game, either fantasy or science fiction based, is that a number of people are able to use their imaginations to create solutions to problems that are explored as if they were in real life. In a game session there are two types of players: the game referee and the character players. It is the job of the referee to create a world in which there is some problem that needs resolution. And it is the job of the character players to devise a way to combat the problem.

In terms of drama, this initial problem is called the inciting incident. It can be something as simple as a mistaken identity, or as complex as uncovering a secret complex political assassination plot. Whatever the inciting incident, it must be something that prompts the characters to react. Then either through the action or inaction of the characters, the danger level must increase to create the next dramatic phase, the conflict. It is usually during the realization of the conflict that the characters are most prime to establish their personalities. Often, it is most dramatic if the character personalities are established prior to their realization of the conflict. Truly, it makes no great difference exactly when the personalities are established, so long as it does happen early in the scenario.

The next logical dramatic step is to push the conflict to a drastic degree, thus moving it from simple conflict to crisis. At the crisis stage of the plot development, a solution is no longer merely desired, but an absolute necessity.
The **climax** of the plot is the highest level in the progression of action. The climax must bring all elements of the plot together for one final showdown. It is the moment when either all things related to the plot will be solved (at least temporarily), or all will be lost. In a way, the climax must be as significant as the inciting incident, the conflict, and the crisis combined. However, that is not to say that the climax is the most important level. Any climax in a story will fall short of good dramatics or good literature if the preceding three elements are not well established and believable. Without a set of tracks, a train cannot run.

Then of course when the climax is reached, what follows is called the **denouement**, or **resolution**. The denouement does not have to be that the good guys win, although many would like it to be so. Take for example the second story in the Star Wars trilogy, *The_Empire_Strikes_Back*, by Donald F. Glut. In this case the heroes are most certainly spanked by the evil Darth Vader. It is most advisable, however, to let the good guys win most of the time, because that is what most people enjoy from fantasy.

By this point the level of the action in the dramatic sense should be inciting incident as a low level of action, conflict as a rising action, and crisis which must be of inescapable action. These are, in turn, followed by the climax, the highest point of action, and, finally, the denouement, or resolution. In each part the level of action must be rising.
action may be allowed to drop off slightly, but it is a good idea to maintain the intensity at least slightly above the lowest level of the prior action. The following graph illustrates how the rising and falling action occurs in a story such as Dune, by Frank Herbert.

This thesis, or study, therefore is designed as an experiment in writing that fuses the Science Fiction movement with the role-playing movement, for the purpose of illustrating how role-playing games can and are an effective vehicle for postulation of speculative fiction, i.e. both Science Fiction and Fantasy fiction. As evidence of my research of game writing or as many refer, game science, I submit my own original creation of
Starships. I have lead numerous game sessions playing Starships and have found that characters, races, occupations, societies, vehicles, and equipment use the established game number system efficiently. Starships will be the control over the experiment. In the process, therefore, the players will help me create the characters and the story line. While I as the author have absolute control over the world and characters that I write, additional human decisions by the real life players should yield greater spontaneity and thrill to the plot. Simply, the players contribute a set of aspects and character decisions that are not always expected, and often not considered by the author. And also, it is just plain more fun that way.

Here I would like to thank the selected group of volunteers that played the game. They have done well in acting out their respective character responses to situations, scenarios, and plot lines that I, the game referee, have provided. All of the game interaction has been was recorded and transcribed into the short science fiction story, which is included in section three of this paper.

In the following sections I have provided brief excerpts from Starships, and a short story which is the end product of this study. The selections from Starships that I have provided in this study are the following: Chapter I: Races, Chapter II: Major Scores, and Chapter IV: Character Titles. For reasons of copyright security, Starships in its entirety is available only upon written request.
Welcome aboard! I am Erka, your Captain. Time and time again I have played and refereed games that satisfied my sense of fantasy adventure but not my sense of reality. Yes, I know, you're saying to yourself, "But Captain, are these games not of a fantasy nature to begin with?" Well, yes they are, and many are quite exciting, but none of them allow the danger for characters involved to stay at a great level. I have seen too many characters under my game master’s influence become absolutely invulnerable at an unrealistic rate and to an unrealistic degree. Starships is not a game attempting to abandon the idea that a character can become so powerful or so skillful that nothing can beat him, but a game that suggests a strain of fantasy that is closer to reality than most games, but not so complicated that a long gaming session accomplishes very little in the character’s life.

Some games require great amounts of time for the characters to simply fire a round from a 9mm handgun. In the player's time, this might normally take five minutes, when we all know that in real life it shouldn’t take more than a fraction of a second. This is true in real life and should also be true in a character’s world.

Other games, use a system of a character’s sustained damage in a way that Thag the Destroyer could enter into a drinking game with a dwarf, shove a long sword through his skull and still be healthy enough to drink the dwarf under the table. Sure, a system such as that affords your character certain luxuries (such as not having any threat of death) but realistically it doesn’t make sense, it just doesn’t work.

In short, Starships is a role playing game system that attempts to suspend your sense of reality, transferring your imagination into the wonderful realm of fantasy, but doing so in a way that could be real, and without all of the complicating; minuscule rules and regulations that force players to hold a characterization at bay in a lengthy combat system. This game is an attempt to do away with the “five minute gunshot” and the “Thag the Destroyer” syndromes.

As you will see, the pre-game character generation equations are simple to follow, and can quickly be memorized. The hardest part about creating your character is making the choices necessary to help give the character its personality. The most time consuming of these choices is which Character Abilities are going to make up your character. But we'll get to that in just a little while.
Chapter I: Races

First, you need to choose which race of being your character will be. Below, in alphabetical order, are the ten races that are known to exist in the Starships galaxy. Most are star faring races, some use magic, all are equal in different ways. Play all of them at least once to find which is most likely your favorite. Included with each description is a rendering of what the particular race looks like in its "most perfect" form.

Allimahrians

The allimahrians are an amphibious race originating from the oceanic planet of Allimahr. They are a deep red-brown as adults and have webbed feet and hands. All allimahrians can live as long as 150 years, comparable to that of a human life span. They stand between three to five feet tall, and weigh 80 pounds on average. They reproduce asexually; therefore, do not take mates. However, they do band themselves into clans and families for life-long companionship. A clan and a family are vastly different to an allimahrian. An allimahrian is born into a family, and much like a human marriage when you are gained as a son-in-law or daughter-in-law, the allimahrians are accepted into a clan as demonstration of their adulthood.

If an allimahrian is to have a child, while still part of its family and outside of a clan, the parent and child are considered as social outcasts. Allimahrians will have one to four children throughout their lifetime, and each pregnancy will yield one or two offspring. They are mammal-like because they give birth but are reptilian-like because the babies do not nurse, and are fully capable of self survival after two months. That is, an allimahrian child can instinctively obtain food, but must be nurtured to a certain degree in order to learn the civilized society traits of its kind.

Many have thought that the allimahrians will soon die out and are surprised that they have not done so yet, because of their asexual reproduction. Usually asexual reproduction does not give the privilege of genetic diversity; that they should all be identical. In sexual reproduction, the combination of the two parental genetic codes create an offspring with genetic traits from both
parents, thus, strengthening the genetic possibilities. For an allimahrian, these genetic codes can not be strengthened by sexual reproduction (a combination of two parental gametes), but by a pseudo-mitosis type of pregnancy. A normal mitosis is a single division of a single cell creating two sister cells that are genetically identical. Factors such as climate, exposure to sunlight, food ingested during pregnancy, emotional well being, cleanliness of breathing atmosphere and living water, all cause an allimahrian’s pseudo-mitosis offspring to mutate and carry a different genetic code than that of the parent allimahrian, thus strengthening the genetic codes that are passed on to the next generation. Of course, the most significant part of the offspring’s genetic code is that of the parent allimahrian’s genetic code.

As the allimahrians’ scientific knowledge evolved, they found ways of artificially altering and mutating the genes of the embryos with more predictable results by administering a drug known as galmadi. Galmadi is an plant extract from galm sea weed. Galm contains a chemical that is nearly identical to the hormone which an allimahrian produces in its womb. The hormone, called shadl, takes proteins and amino acids that are intended to build embryonic DNA that is identical to the parent’s, and alters them, thereby causing the embryo’s genetic code to be altered and diverse from the parent’s. Allimahrians began injecting galmadi into a parent’s womb in order to assist the shadl and speed the process of DNA alteration. By altering the chemical bonds of the galmadi, one can also alter the results of the embryonic genetic diversity, thus, allowing for accurate genetic engineering. One thing to remember though, is that genetic engineering is a highly controlled process that is kept in check by licensed scientists.

Allimahrian children reach full adulthood after eight to ten years and at that time will begin giving birth to their own offspring. An allimahrian’s gestation period is six months. It is possible for an allimahrian to become pregnant again after a week from just having given birth. All of an allimahrian’s pregnancies happen before the age of twenty-five.

The thing that makes allimahrians so interesting is the genetic engineering possibilities available. Below is a sample list of mutation possibilities. Each allimahrian may have one, and only one mutation, or invent your own, subject to its Captain’s approval.

Possible allimahrian mutations:
1. humanoid
2. head shape
3. extremities shape
4. internal organ arrangement
5. +1 to a Major Score
6. extra extremities
7. extra internal organs
8. unique extremities
Breorgans

The breorgans originate from the jungle planet Creegree. They are very tall, usually between six to eight feet tall, reptilian yet semi-humanoid-shaped creatures. They are a yellowish green while still young but fade into a very pale yellow when attaining old age. They have extraordinarily long arms but not descending past their knees, claws on their fingers and toes, and sharp teeth that set themselves into a constantly snarling gnash. They drool, growl, and grunt while eating (ALL of their food must be fresh meat... like, still alive if possible).

Breorgans are attracted to an opposite Looks score. This is one of the reasons that they are so disliked and feared throughout the known star systems. They respect only their own race but will from time to time befriend other races if it is to their advantage or if an individual has proven himself to be worthy of the company of a breorgan. The breorgans are a highly arrogant, self-centered race. To be honest, they have absolutely nothing to contribute to anyone but chaos.

Breorgans get a special bonus of 25% intimidation under the Looks Major Score. Further, a breorgan receives intimidation Character Ability for free.

Adjustments to Major Scores are: +3 Strength, -3 Looks.
Dela-Benatans

The dela-benatans originate from Dursy, the fourth moon of the planet Oeladine. Dela-benatans are almost exactly like humans in consideration to their internal structures, but with the exception of their reproductive system. The major differences are that they have three fingers and one thumb on each hand and four toes on each foot. Their bodies are structured like the greatest images of Adonis ever known. To find a dela-benatan's Frame Major Score roll 4d4+4. Dela-benatans can never receive the Frame Classification of Endomorph. They have very long, lush eye lashes, perfectly shaped eyebrows, and soft long hair that never goes bald. Otherwise, they have no body hair at all. They have large, bright, blue eyes. Their skin is perfectly smooth without blemishes. Their ears have a rounded point on top and are set about two inches higher than a human's.

As a human typically has a 5% chance of becoming pregnant, a dela-benatan has a 1% chance. Because of this extreme difficulty to become pregnant, there was once a time that the race almost became extinct. To remedy this dire situation, their scientists genetically altered the entire race to be more alluring as well as more easily aroused. The alternative to this was to try to find a way to make the race more fertile. How boring. As their populations returned to a healthy level, this genetic change became less and less noticeable as most other races thought of them as just really horny people. In fact, a dela-benatan must roll an Emotion Resistance check each day to resist their natural sexual urges. If this check is not successful, and the character cannot satisfy the urge, the character suffers a penalty of -5 to all Mind Major Scores until the problem can be solved one way or another. Dela-benatans receive Seduction Character Ability for free.

Adjustments to Major Scores are: +3 Looks.
**Enconazoids**

The enconazoids originate from the planet Rastel. The enconazoid race is a branch of beings originating from parental unions of rastelloc males and human females. These founding births happened shortly after the war between the Rastelloc Empire and the Javaro-Human Alliance. During the war, human females were taken as slaves by the rastelloc and impregnated on the planet of Rostel. Their children, being born into slavery, were called enconazoids. The name enconazoid literally means "half-breed slave" in the rastelloc language.

The few laboratory inseminated human eggs had such extensive lethal genetic flaws that none lived more than a week. The rastelloc themselves were also unable to breed with the enconazoids for the same reason. Only the parental union of a human and a rastelloc, or the parental union of two enconazoids can produce a child enconazoid. These few human female slaves eventually died of age, but their legacy offspring remained. Four Hundred years after the first enconazoid birth, the enconazoids as a collective rose up and liberated themselves, and left the planet Rastel. While many settled on various planets, many tour the galaxy in search of work. They are proud to call themselves the infant race of the galaxy.

Enconazoids are hateful to most races, especially rastelloc, but peaceful with humans. They once lived in a tight militaristic society similar to the rastelloc's. But soon after their liberation into freedom, they cast off most remnants of their old society for the luxuries of freedom.

Enconazoids are dark in complexion, have hair patterns like a human, the eyes, ears, and muscular structures similar to that of the rastelloc. In the enconazoid society, freedom of self is of utmost importance. Thus, they are granted a 25% bonus to any of one Character Ability if the character is a Freelancer or a Clansman.

Adjustments to Major Scores are: +1 Strength, -1 Perception.

The rastelloc tried to breed the humans with the enconazoids and found that it was genetically impossible.
Frints

Frints originate from the jungle planet Vansow. Frints are small, fur-covered creatures with markings similar to those on a chipmunk. They stand one and a half to three feet tall at most. Their shapes resemble the mere-cats on Earth. Some tribes live in tent communities, but most live in cave communities. They live in primitive, hunter-gatherer clans. They use bows and arrows, spears, slings, clubs and traps. For this they receive a bonus of 25% for each of these style of Melee Weapon, and one of which they get for free. They speak only their own language. The only Character Titles that a frint may be is that of a Wild Clansman, or a Wild Hunter.

There have been documented cases of frints that were able to display magical ability. Those individual frints are regarded as holy. There is a 1% chance for any frint whose Mind Major Scores are 16 or higher to have magical ability. Those frints that are magical can cast spells similar to those of a Guardian’s Disciplines. The Guardian Disciplines available to a magical frint are Disciplines of Essence, Empathy, Truth, Telepathy, Telekinesis, and Cell Renewal. A magical frint receives its initial Discipline points as equal to its Perception Major Score, and increases at a rate of one point for every one hundred Adventure Points earned.

The frints are highly religious creatures. They worship their forests, and can use only natural armors and weapons. They are not usually raised as pets or slaves because of a metaphysical bond to their home world. If a frint is taken from Vansow against his will, he will lose all of his magical ability and take on a hostile nature.

Adjustments to Major Scores are: -2 Strength, +2 Perception.

Grastainians

The grastainians originate from the planet Laracus, a planet that is almost completely desert and city. Laracus is almost totally ravaged by pollution and warfare against the breargans. There are two basic social classes of grastainians, the desert dwellers and the city men. The desert dweller grastainians are a highly religious race, and the city men grastainians are lucrative, profit margin mongers. There is almost no way to tell whether or not a grastainian is a desert dweller or a city man, with the exception of its religious convictions.
Physically, they are hairless, have unusually long arms and legs, spindly whipcord muscles, and no body fat if native to Laracus. Thus, they have a special method of rolling their Frame Major Score: roll 1d10+4. They have three fingers on each hand and three toes on each foot, collapsible fanned ears, and dorsal fin on their backs that are brimming with blood vessels that both collect or release heat. They have an enlarged chest cavity that allows them to inhale and hold their breath for longer than would a human in order to extract moisture and oxygen from the dry, thin Laracus atmosphere. They stand at a height of about five feet tall and on average weigh up to seventy pounds. The most unique ability of a grastainian is their ability to spit or inject from a bite a venom. This venom is delivered from two venom sacks located around their two upper canine fangs, like a snake’s. A single dose of the venom can blind any creature if spat into the eyes, or kill any creature less than 200 pounds, if injected. If the poison injected creature is heavier than 200 pounds, the poison works as a neuro-toxin. A creature that is 400 pounds or greater, the poison has little or no effect. Grastainians are immune to the venom.

Grastainians are very business-minded and usually do not care to associate with people that do not care about lucrative dealing. They are not elitists but businessmen to the extreme and associate within a business society.

Humans

Go look into a mirror. That is a human that you are seeing. Humans in Starships originate from the planet Earth. It is a mixed environment planet with one uninhabitable moon. Any physical variation of human found on the real Earth is possible in Starships, although they are all categorized as just human, as is true with the other races in the game.

Although each race is categorized by its basic name, there are many variations of
Physical characteristics and ethnicity. In Starships, a human is considered the base, or the neutral race upon which the differences of other races are adjusted.

The one advantage to playing a human is that a human has the ability to adapt to any situation with greater ease than any other race. Thus, because of a human's ability to reason, s/he gets a bonus of 25% towards Logic Character Ability which they receive for free.

Javarans

The javarans originate from the planet I'sipponcof. A javaran looks like a half cat, half human-like being. When the player is marking down a javaran's "Hair," the player must consider long or short, calico or tabby, tiger stripe or solid color, etc. Javarans have the face, body, hands, and feet like humans but also the tail, ears, whiskers (the males tend to have longer ones than do females), fur, teeth, and eyes like cats. But remember, they are not cats, and they are not humans, and become offended if one is to confuse them with such. On average they stand four to six feet tall, and weigh about 100 pounds.

Javarans are extremely friendly with humans, and the opposite gender of their own race if in a paired situation.
In a group of javarans where the population is of at least a 3:1 ration of females:males, the females tend to bond together and alienate the males. The same is true with the males. In an evenly mixed group, they tend to pair up and tensions remain level.

Contrary to popular belief, they do not have nine lives, and sometimes do not land on their feet. Javarans were the first alien race to make contact with the humans. The javarans do not wear clothing because they feel bound and it will temporarily frustrate them to a point of a -10 Sense Major Score. Belts, equipment harnesses, decorative sashes, protective eye wear, jewelry, or weapons are among the only items that anyone will ever see a javaran wearing. A javara may wear armor when going into a battle situation, but he will also be the first one out of it after the danger is over. Javarans can learn almost any language, as can humans, but they also use a secretive body language that can only be employed by a javaran, although other races might be able to understand this body language.

Adjustments to Major Scores are: +3 Agility.

**Rastellocs**

The rastellocs originate from the half-jungle, half-desert planet of Rastel. The rastellocs are a Spartan-like star faring race. Rastellocs have two or three different colors of hair (ranging from light brown to black), dark-complexioned skin, snarled teeth, heavy builds, and a heavy overhanging eyebrow ridge that travels to the side of their heads and above their temples. Near the top of their head sit two, stiff-pointed, independently maneuverable, dog-like ears. They stand between six to eight feet tall, and weigh about 300 pounds. Even though the rastellocos are enemies with the Varu Imperium, they are not sympathetic to the United Earth Confederation's efforts either, because both sides are comprised of humans.
movements. Yes, they do not favor either side of the struggle, but they favor the Varu Imperium much less than the Confederation. Plus the fact that since The United Earth Confederation was able to effectively defend and counter attack the rastellocs, ... well, the sheer gall of such an introduction to the humans impressed the rastellocs.

But then the rastellocs were attacked by the Varu Empire. The rastellocs, once having occupied a great number of star systems as part of the Rastelloc Empire, has now been thwarted back by the Varu Imperium, an empire of Nazi-like humans. The rastellocs have sworn one day to reclaim their territory and destroy this human empire. If the Earth Confederation ever conquers the Varu Imperium, the rastellocs will congratulate Earth then threaten attack in order to reclaim their old empire. At present, the Varu Imperium is just too powerful for the rastelloc’s war-like renegade starship tactics. Rastellocs receive Melee Weapon for free with a 25% bonus.

Adjustments to Major Scores are: +2 Strength, -2 Perception.

**Sophilians**

Sophilians originate from the planet Philkran. They are slightly taller than humans, with a large rounded head, light creamy-metallic blue skin, no hair except thick black eyelashes, large white eyes with yellow-brown to violet irises, six fingers on each hand, and two toes on each foot. They stand from five to seven feet tall, and weigh from 100 to 300 pounds. Many consider them as the most peaceful race since they have not been in any kind of war for thousands of years, with the exception of defending their own soil. Their society stresses that individuals use a thought process that relies heavily on telepathy.

The planet Philkran was one of the few planets to have withstood being conquered by The Varu Imperium. The sophilians have a very strong diplomatic relationship with the still very young Galactic Counsel. Sophilians have settled with The Varu Imperium for neutrality, basically because the sophilians "kicked their Imperial butts" every time they tried to invade Philkran.
Flight is a telekinetic ability to fly through sheer force of Will. The speed at which sophilians can fly is equal to ten times their Will Major Score, and the distance is equal to five times their Will Major Score. Sight is very similar to a combination of the Guardian's Empathy, Truth, and Telepathy Disciplines. Sight may be used twice daily.

All sophilians have Flight and Sight. In fact, it was the sophilians who first harnessed the powers of a Guardian and created the Oath. Though the humans were taught the technologies of light speed by the javarans, the sophilians later taught them how to hone their mental abilities through meditation, thus uplifting the humans to the ways of the Guardians.

Chapter II: Major Scores

Now that you have chosen a race for your character, it is time to find out what it is made of. Each character is merely a set of numbers, rules, and equations compiled together in such a way that you and your Game Captain will be able to interpret in order to bring a personality to the numbers, to bring life to the character. Each character has a basic set of scores called Major Scores.

The Major Scores are broken into four categories to provide convenience and order. The categories are Features, Body, Mind, and Spirit.

In each of the four Major Scores categories, you will find yet a smaller division of scores.

FEATURES

The first Major Scores category is called Features. Features is divided into two parts, Looks and Frame.

Looks is a measure of the beauty or ugliness of your character. I know, you're saying, "Captain, comeliness is a matter of perspective. Beauty is in the eye of the beholder. Sir." Well, that's very true. But, as a real human playing the role of a breorgen, the beholding eye would see Michelle Pfeiffer as one of the most grotesque creatures ever to have existed. And as the player, if you would really-truly-deep-down-agree, well, you better go get your head examined. Depending on your character’s level of Looks, there is an adjustment for Intimidation and Seduction [see Table II.a].

Frame is a description of the physical build of the character by categorizing the character’s Frame score into one of three body types; a fat person is an Endomorph, a medium or thin person is an Ectomorph, and the muscle bound Arnold Schwarzenegger type of person is a Mesomorph. Each of these classifications gives a modification to your character in several ways. First, your character must be able meet the Strength qualification so that the Strength and the Frame of a character agree with realism. A character with a Strength between 1 to 13 may be classified as an Endomorph. A
character with a Strength between 1 to 16 may be considered as an Ectomorph, and a character with a Strength 14 to 25 may be considered as a Mesomorph. If your strength does not fit into the qualifying range to be considered as the Frame Class that you rolled, then adjust your Frame score so that your Strength falls just into the nearest Strength Qualification range. And finally, Frame gives an adjustment to Stamina and Agility. This information is found in Table II.b.

**BODY**

In the second Major Scores category, Body, you will find Strength, Stamina, and Agility.

**Strength** is a measure of the character's ability to use muscles and skeleton. It regulates the maximum amount your character can lift and carry, a bonus to strike used in the Rumble & Melee Attack Equation, and a bonus number to the amount of damage that your character can dish out after succeeding a hit from the Rumble & Melee Equation. This information is found in Table II.c. Strength is also one of the Major Scores used to calculate your Biorometer Health Points (see Section III. Biorometer).

**Agility**, the third Body score, is a measure of the character's grace of motion. It regulates your character's basic defense percentage which is the top percentage listed in the Rumble & Melee Defense Equation, and the Infantry Defense Equation. Agility also regulates balance and reflex percentage which is rolled against when your character needs to catch or keep his balance, and at the beginning of combat to find where in the order of turns is your character's turn. And finally, the total number of actions that a character may commit in a single combat round. This information is found in Table II.e.

**MIND**

The next Major Scores category is Mind. In the Mind category you will see three smaller divisions. Intellect, Sense, and Will.

**Intellect** is a measure of the character's ability of mental capacity of computation, reason, and understanding. Intellect regulates a discount to the cost of buying Character Abilities, and a percentage bonus to computational sciences. This information is found in Table II.f.

**Sense**, the second Mind score, is a measure of the character's ability to comprehend life's little instruction manual; you know, common sense. It regulates the initial number of abilities; those that your character starts out with and
gives a maximum amount of time that your character can function without sleep as a number in hours called maximum REM deprivation. This information is found in Table II.g.

Will is the third Mind category, which is a measure of the character's ability for personal mental and emotional defense. It regulates percentages for Pain Resistance which deals with resisting the pain that comes with the wounds that the character may encounter, and a percentage chance for Emotional Resistance for those times that your character must resist his emotional instincts. Your Captain will let you know when you must roll against each of these resistance percentages. This information is found in Table II.h.

SPIRIT

The third Major Scores category is Spirit. Spirit is broken down into only two divisions; Perception and Luck.

Perception is a measure of the character's five basic senses and the ability for interpreting that gut feeling, or noticing something small or insignificant. Perception regulates an adjustment to the character's Luck score, and a percentage for that weird sixth sense called second sight. This information is found in Table II.i.

Luck, the second Spirit score, is a number that is used in a way that augments any die roll. That is, if you need to make an Aptitude percentage roll, you may add any or all Luck points to your target number in order to make the target number easier to roll under. The second option is that you may add any one or all Luck points to an attack role or defense role granting a larger rolled total. Each character, except a Freelancer, may use these points only once per game. But a Freelancer's Luck points are replenished once per character day.

Rolling Major Scores

Soon we will take a look at the charts. But first let me explain how to derive a character's Major Scores. The first method, and perhaps the most unforgiving, is to roll 1d20 for each and every Major Score. The second method is to roll 2d10 for each Major Score. And the third, and my personal favorite, is to roll 5d4 for each Major Score. This third method is my favorite because it does not allow for raw scores below a five, allows raw scores up the maximum twenty, but tends to keep scores near an average. It is this third method that agrees with a standard probability bell curve. All of these rolling methods are standard practice unless special racial instructions are otherwise mentioned, not adjustments but special rolling methods. Pick your method, or have your acting Captain choose, and roll them suckers!

Now that you have all ten of your raw Major Scores, adjust them according to your character's race, and find each score on the appropriate chart and transcribe the line
across from the describing numbers for the score to your character sheet in the appropriate place. Then calculate an average for each Major Score Category, and write it in the provided space. This will come in handy later when you are deriving your Character Ability Base percentages.
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Table II.b. Strength

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Table II.c. Strength

Table II.d. Stamina

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**Table II.g. Sense**

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Chapter III: Biometer

All characters can sustain about the same number of damage points, some more than others, but they are all within a limited range. This prevents super human characters—those with "Thag the Destroyer" syndrome.

In order to derive the scores in your character's Biometer, take an average of Strength and Stamina. Round off to the nearest whole number. Then find the averaged score on the chart below and fill in your character's Biometer with the numbers indicated (see Table III.d). Finally, you must modify the raw Biometer numbers with the adjustments indicated within Table III.b. All of these finalized Biometer numbers are to be written in the upper section of the Biometer chart found on the character sheet; this upper section and the numbers that go there are called Health Points. The middle section is called Health Status and is used when your character receives damage. Simply, subtract the number of points lost from the concerned body part's Health Point total and write the current Health Points in Health Status. The lower section is called Armor Points and will be discussed in the Equipment Chapter.

As you will notice, there are eight body parts mentioned on the Biometer. They are classified in two ways; vitals and secondaries. Head, chest, abdomen, and back are vitals. Arms and legs are secondaries.
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Situations and Results of Biometer Damage

Each Hit

In combat, each time that your character gets hit for damage you must roll successfully against the Pain Resistance percentage. If you fail, you freak and are pretty much out of control. Your Captain will decide what way you freak out. If you roll successfully then everything is cool, you hope. Just keep your head down and don't get shot again!

Incapacitation

If a secondary reaches 0, the character has been incapacitated. Incapacitation means that your character is conscious, but damaged so badly that he cannot commit any actions. He just sits there.

Unconsciousness

If a vital reaches 0, your character is unconscious.

Table III.c. Resistance Rolls

<table>
<thead>
<tr>
<th>Damage Sustained:</th>
<th>Roll</th>
<th>Success</th>
</tr>
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<td>Roll</td>
<td>Success</td>
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Each Hit taken........Pain Res........Cool..........Freak

> 75% to any part....Pain Res....Incapacitated....Unconscious

Situations with Immediate Results:

<table>
<thead>
<tr>
<th>Damage Sustained:</th>
<th>Immediate Result:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary at 0..............Incapacitation</td>
<td></td>
</tr>
<tr>
<td>Secondary at -2x's...........Limb Severed Off</td>
<td></td>
</tr>
<tr>
<td>Vital at 0..................Unconsciousness</td>
<td></td>
</tr>
<tr>
<td>Vital at -2x's or &gt;............Death</td>
<td></td>
</tr>
</tbody>
</table>

Severed Limb

If a secondary reaches -2x's the normal level, that body part has been completely severed off.

Massive Wound

If you take a single damage hit that is 75% or greater to a single body part you are automatically incapacitated, and you must roll against Pain Resistance percentage. If you fail, you are unconscious. If you succeed you are incapacitated.

Death

If a vital reaches negative 2x's the normal level, you die. That means don't bother trying to take the character to the hospital. Just quit crying, and make a new character.

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Chapter IV: Character Titles

At this point your character is probably just a nameless, no personality set of scores. You’ve thought about what he or she might be but nothing is set in concrete except your scores. Even if you don’t want to be anything in particular you must at least choose a generalized title so that you know which of the Character Abilities will make up your character’s personality. You must choose at least one, and no more than two titles. But if you want to play a character with two titles, there are more restrictions than if you choose just one.

The titles possible are an Agent, a Clanman, a Crew Member, a Freelancer, a Guardian, a Hunter, a Martial Artist, a Pilot, a Programmer, or a Soldier.

Character Abilities are the basic make up of your character’s personality. Each Character Title has two lists of Character Abilities, the Required List and the Suggested List. And consequently, your character will go through two rounds of Character Ability choosing. All characters must take as many of the Character Abilities from their Required List as possible, in the order listed.

When choosing your Initial Character Abilities, refer to your Sense Major Score to find out how many Character Abilities are granted to your character in each choosing round at the time of initial generation. These Initial Character Abilities have a cost of "1" Initial Character Ability Point.

In the first choosing round, Initial Character Abilities must be taken from your character Title’s Required List.

In the second choosing round Initial Character Abilities may be chosen from your character Title’s Suggested List, or from the General List at double cost. Often, if you choose Character Abilities from your character Title’s Suggested List, there is some sort of bonus to the character or other Required Character Ability Aptitude percentages.

If your Sense Major Score is not high enough to grant you enough Initial Character Abilities to choose all Character Abilities in your Title’s Required List, tough. Choose what you can in the order of importance, then go on to your second choosing round. As you will notice, in each Required List there are certain Character Abilities marked with an *. These * marked Abilities are at the end of each Character Title’s Required List. You must take the Required Abilities of your Title in the order that they are listed.

After buying the * marked Required Ability, gain a 100% bonus to it or any other previously purchased Ability, or you may spread the points out between many Abilities. These points are distributed as Aptitude percent points.

Then, for every ten Abilities bought after your
last Required Ability has been purchased you may grant your character another 100% bonus to be distributed between your Ability Aptitudes.

Agent: An agent is a spy. Agents are sent by their affiliated agency to complete secret tasks such as stealing plans, equipment, or information; assassinating a specific person, or government official (either within an opposing government or your own); or retrieving political prisoners, or escorting political persons across governmental borders for defection, etc. These are only a few examples of what an agent can and does do.

Each set of agency orders brings a new and individually handled mission. Some missions are carefully planned for you, some you work with a team of experts or soldiers, and occasionally there are some that are solo-fly-by-the-seat-of-your-pants missions. Some missions are ordered to protect political alliances, others are meant to start wars. The most important aspect of an agent is that he remain unquestioningly loyal to his agency. If he is not, he will be, how shall I say it, "ELIMINATED" by his own agency. They are trained to complete missions to the best of their abilities and the best of their knowledge for the greater good of the agency or their agency’s government, and not consider personal ethics or emotion when completing their mission. However, some missions require that the agent discover the truth surrounding a situation and rectify a threat whatever way possible. This is perhaps the only time that an agent’s personal opinion, ethics, or emotions are a consideration.

Perhaps the greatest agent of all times was from Earth. His name was Bond, James Bond, 007 of the British Secret Service.

In order of importance, below is the Required Lists for an agent.

1) Military Basics
2) Self Control
3) Dodge
4) Infantry Weapon
5) Vehicle Driving
6) Disguise
7) Linguistics
8) Forensics
9) Demolition
10) *Espionage

In alphabetical order, below is the Agent Suggested List.

Acting
Advocatiion
Animal Riding
Computer Programming
Cycle Riding
Etiquette
Forgery
Gambling
Government
Hand To Hand
Intimidation
Pilot Light Craft
Lip Reading
Melee Weapon
Narcotics
Reputation
Seduction
Starship Systems Operations
Clansman

A clansman is any type of character that lives in a large, tight-knit family, nomadic, or tribal society. Assuming that in the context of this game, the word "civilized" means "of a technological society," there are three kinds of clansman; wild, nomadic, or city. All three kinds are tribal in one way or another considering religion, philosophies, education, group protection, group provision, procreation, fashion, custom, etc.

Wild clansmen tend to be hunter-gatherers, living in dense jungles, or other uncultivated areas. They tend to have semi-permanent housing in the form of a village. They wear animal skins and furs as clothing, and some might even be advanced enough to weave simple cloths. Their weapons tend to be melee or thrown projectile types. All wild clansmen are wild.

Nomadic clansmen tend to range from hunter-gatherers to herders and farmers. They are not primitives, but they are not technologically advanced either. They tend to use gun powder weaponry of one form or another ranging from rifles as simple as a flintlock or a musket to a Winchester M70. Basic radio and simple twentieth-century Earth style combustion engines are usually the most advanced forms of technology that nomadic clansmen can be found to possess. Custom, religion, tradition, and superstition play a very large part of their daily lives. In a galaxy that is controlled by currency, they tend to be dirt poor, struggling for an existence, trying to feed and cloth their families, trying to survive.

City clansmen tend to range from honest factory workers and independent small time merchants, to thugs, drug dealers, smugglers, pimps, space pirates, etc. Occasionally a city clan will get lucky and make it into the high society world, but they usually get there through illegal means; white collar crime—The Mafia. Although it may seem as though a city clansman is the perfect example of a low-life, that is only the prejudice conception that most of the rest of society has about them. But in truth, the internal workings of their own society is that of honor and respect for fellow family members. Often several families will bond together, combining their names into one, mixing their religions, and combining their customs and practices. There have been city clan census counts as large as 40,000 members in a single clan.

Three of the most common occurrences of these huge families are 1) a clan populating an entire single area of a city, thus considering it a ghetto; 2) constant nomadic convoy movements across the galaxy, or across the ultra-highways of a planet's surface; or 3) small cities or countries founded on the financial success of an individual member who claims chief-dom or dictatorship. They use any technology that they can find, steal, conquer, or buy.
In order of importance, below are the Required Lists for each kind of clansman.

Wild
1) Religion
2) Hand To Hand
3) Dodge
4) Melee Weapon
5) Dancing, Folk
6) Woodworking
7) Endurance
8) Stealth (any but Street)
9) Hunting (not mon)
10)*Animal Riding

Nomadic
1) History
2) Animal Care
3) Farming
4) Animal Riding
5) Dancing, Folk
6) Vehicle Driving
7) Basic Tech
8) Raggie
9) Endurance
10)*Stealth (any one style)

City
1) Dodge
2) Vehicle Driving
3) Infantry Weapon
4) Communications
5) Pilot Light Craft
6) Reputation
7) Intimidation
8) Hand To Hand
9) Sting
10)*Street Stealth

In alphabetical order, below are the Suggested Lists for each kind of clansman.

Wild
Acrobatics
Animal Care
Cosmetics
Culinary Arts
Disguise
Graphic Design
Leadership

Nomadic
Acrobatics
Acting
Cosmetics
Culinary Arts
Cycle Riding
Dance, Folk
Disguise
Dodge
Gambling
Graphic Design
Hand To Hand
Infantry Weapon
Repair Land Vehicle
Leadership
Medical
Melee Weapon
Music, Folk
Stealth, Desert
Stealth, Jungle
Stealth, Mountain
Stealth, Street
Religion
Woodworking

City
Acrobatics
Basic Tech
Cosmetics
Culinary Arts
Cycle Riding
Dance, any
Demolition
Dodge
Forgery
Disguise
Gambling
Graphic Design
Hand To Hand
Infantry Weapon
Intimidation
Leadership
Medical
Melee Weapon
Narcotics
Navigate Ocean
Navigate Space
Pilot Heavy Craft
Pilot Light Craft
Repair MBF Engine
Repair Hypertransit Engine
Repair Land Vehicle Engine
Repair Sonic Engine
Seduction
Sting
Religion
Vehicle Driving
Woodworking

Crew Member:

The title crew member is just that, a title. A crew member is anyone who is affiliated with an official, and organized starship part of the team, "crew."

For crew members to initially gain a rank as Ensign, the character must go through basic training courses at an established academy. That is, the character must take all of the Character Abilities listed in the Basic Training Required List. If your character cannot fulfill the Basic Training Required List within the two choosing rounds, then your character has failed out of the academy without a rank, and cannot be a Crew Member.

Fulfilling the entire Basic Training Required List is a difficult thing to do, but the rewards are vast. After your Crew Member has graduated from his academy, he may begin buying from one of the Officer’s Required Lists. These lists are categorized as Engineering, Tactical and Security, Command, and Science and Medical.

Rarely will you ever find a character that has come straight out of basic training and be able to accept an officer’s rank greater than Ensign or Lieutenant. This is because there are so many Required Character Abilities that it is highly improbable for any character to be able to afford all of them with their first round grant of Initial Number of Abilities (governed by Sense Major Score).

In order of importance, below is the Basic Training Required Lists for a crew member.

Basic Training Required List
CT 1) Military Basics
CT 2) Military Presence
CT 3) Communications
CT 4) Program Computer
CT 5) Vehicle Driving
CT 6) Self Control
CT 7) Mathematics
CT 8) Physics
ENSC 9) Navigate Space
ENSC*10) Starship Systems Ops.

After your Crew Member has taken all Basic Training Required Abilities, then you may begin choosing from your Officer’s Required List at normal cost, from the Crew Member Suggested List at normal cost, or from the General List at double cost.

For every two Required Officer Abilities your character buys, there is a single rank promotion. Notice also that for each Officer’s list, the 15th Ability is marked with an * just as the 10th. Once you have taken all Basic Training and Officer Required Abilities the 100% bonus rule applies individually to both * Abilities taken.
After taking all Basic Training Required Abilities, you have the option of not going into an Officer’s program, but choosing from the Suggested list. In this case your rank promotions come once every four new Abilities. If you should choose not to enter into an Officer’s program but take from the Suggested List, you may at any later time go back to the Officer’s List.

After all ten Basic Training Required Abilities and all five Officer’s Abilities have been taken then you must choose new Abilities from the Suggested List at normal cost, or from the General List at double cost in order to continue rank advancement. At this time the rank promotion rate increases from one rank every four Abilities, to one rank every two Abilities.

Standard Rank Advancement

Listed below is each possible rank, from least to greatest, and its standard abbreviation:

CT  Cadet
ENS Ensign Second Class
ENFC Ensign First Class
LIEC Lieutenant Second Class
LIFC Lieutenant First Class
LICR Lieutenant Commander
CMDC Commander
CPCL Captain
ADML Admiral
GADM Grand Admiral

Engineering crew members are responsible for maintaining and repairing 1) structure integrity, 2) engines, 3) main computer and sub-computer cores, and 4) weapons and shields, 5) primary and secondary systems (Primaries include: power plants, life support systems, sensor blocks, navigational systems, food processors, bio-waste neutralizing units, and star-com transmitters.

Secondaries include: docking equipment, artificial gravity systems, medical lab equipment, any recreation facilities, invisibility units, emergency escape vessels, shuttles and starfighters, tractor beams, anti-time displacement modules, and crew quarters).

Tactical and Security Officer’s Required List:

Rank

Adv.: Ability:
yes 11) Graphic Design
no 12) Basic Tech
yes 13) Repair (any one)
no 14) Repair (any one)
yes 15) Engineering

Tactical and Security Officer’s Required List:

Rank

Promotion: Ability:
yes 11) Weapon Lore
no 12) Endurance
yes 13) Intimidation
no 14) Psychology
yes 15) Forensics
Science and Medical crew members are responsible for 1) exploration and experimentation data records, and 2) the mental and physical health of the ship’s crew.

Any starship that is Size Class 5 or greater requires a minimum one crew member from each of the first three categories. Any starship that hosts a crew compliment of fifteen or more must also have at least one Science and Medical crew member. The maximum ratio of crew compliment to Science and Medical crew members is 50:1.

Science and Medical Officer’s Required List:
Rank
Adv.: Ability:
yes 11] Biology
no 12] Chemistry
yes 13] Psychology
no 14] Narcotics
yes 15]**Medical

Command crew members are responsible for maintaining and operating 1) crew training or shift schedules, 2) overseeing navigation of the ship, 3) encounter decision making, 4) diplomacy, and 5) practically everything else.

Command Officer’s Required List:
Rank
Adv.: Ability:
yes 11] Leadership
no 12] Advocation
yes 13] Research
no 14] Logic
yes 15]**Reputation

In alphabetical order, below is the Crew Member Suggested List.

Advocacy
Anthropology
Biology
Chemistry
Etiquette
Endurance
Government
Graphic Design
Heavy Weapons Operations
History
Leadership
Linguistics
Lip Reading
Literature
Logic
Melee Weapon
Pilot Heavy Craft
Pilot Light Craft
Pilot Medium Craft
Repair Craft Systems
Repair Hypertransit Engine
Repair Land Vehicle
Repair MBF Engine
Repair Megabot
Repair Sonic Engine
Repair Spatiotemporal Engine
Planetology
Psychology
Reputation
Research
Robotics
Star System Trade Market
Weapons Lore
Wet Ware Operations
Xenology
Zoology

Freelancers

Freelancers are characters that do not really fit into any mold. They tend to be a little bit of all titles, a jack of all trades, master of none, similar to a clansman. Most commonly they are a sword or gun, for hire,
similar to a hunter or an agent. Many have had military training, either as a soldier or a crew member. Often they will have programmer and mechanic knowledge. Formal education giving executive ability is also common. And all freelancers know how to pilot some sort of craft. The galaxy is their oyster! They are the anything, anywhere, anytime, anyway, people. As you will see below in the freelancer’s Required List, there are very few Character Abilities that are required, and there is no Suggested List. In taking Initial Character Abilities from the Required List, observe your character’s Initial Abilities Number, and that is the maximum Required Character Abilities that your character may take. If you don’t have enough Initial Abilities fulfill the quota, tough.

Go on to the second choosing round, drawing character abilities from the General List as you would choose from a Suggested List.

In order of importance, below is the freelancer Required List. You may choose any one Required Character Ability to be your + Character Ability.

1) Vehicle Driving
2) Dodge
3) Infantry Weapon
4) Hand To Hand
5) Pilot Light Craft
6) Program Computer
7) Haggie
8) Basic Tech
9) Repair (any one style)
10) Stealth (any one style)

Although freelancers do not have many restrictions, and most of them tend to be good natured, they don’t usually get legitimate jobs because that means showing up to work, punching in, punching out, and repeating the entire thing over, and over, and over, and over... day, after day, after day, after day, after... It can really cramp one’s artistic style. The tedium of such a routine lifestyle, coupled with the fact that almost all freelancers are wanted by the law, or some powerful "Boss", sets up a situation that if they do take a 9 to 5 job, someone is eventually going to find out their true identity. And that’s bad. In fact, half of all freelancer’s have a price on their head, and all of those that do are most likely being chased by a hunter. If that particular hunter is, shall we say, "eliminated" there will always be another one along soon. So, a freelancer takes jobs that are a one shot deal.

A freelancer always, and I mean ALWAYS, carry his/her personal belongings in some sort of container, usually a back pack, because you never know when you have to jam! This is really the only problem with being a freelancer, always being on the run. And for those freelancers that don’t have a price on their head... wait. They’ll get one eventually. To find out if your Freelancer has a price on his or her head, roll 2d10 as percentile dice. 50% or less means that there’s a hunter after yo’ butt!
The final, and perhaps most important aspect of a freelancer is his Luck Major Score. While every other character can only use his Luck to increase die rolls once per game, a freelancer’s Luck may be renewed almost daily. Actually, he must first use up every point of Luck, then get a good night’s sleep. The next morning, presto! His Luck Major Score is at full again. Thus they are the lucky characters.

**Guardian**

A Guardian is a warrior trained in the use of psychic energies and obedience to one of two oaths; one promotes truth and life, and the other promotes supremacy and power. It is an interesting paradox in that a Lord Guardian from either belief will tell his pupils that his side is more powerful than the other.

A guardian uses psychic energy spells taught by a Lord Guardian. These spells are called Disciplines.

All races have the possibility to find the way of a guardian within and use it properly to their advantage. However, it is more difficult of a task for some races than others. Below are base chance percentages for each race’s ability to become a guardian. These base chance percentages may be modified by adding your character’s Perception Major Score to the base. Once this has been done, roll percentile dice equal to or less than the modified base. Each character only gets one chance to roll.

**Racial Base Chances to be Guardian**

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<th>Race</th>
<th>Base Chance</th>
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<tbody>
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<tr>
<td>Dela-Benatan</td>
<td>12%</td>
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<tr>
<td>Encomazoid</td>
<td>10%</td>
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<tr>
<td>Frint</td>
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<td>Human</td>
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<td>Javara</td>
<td>15%</td>
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<tr>
<td>Rastellloc</td>
<td>5%</td>
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<tr>
<td>Sophillian</td>
<td>25%</td>
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</table>

When ultra-light speed interstellar space travel was introduced to the Humans by the javorans, the javorans were desperately in need of medical technology. The javorans first contacted the Swiss on June 16, 2249. Javaran medical technology paled in comparison to Earth’s. The javorans offered a trade of ultra-light speed interstellar space travel technology, and an alliance with Earth for medical technology. The Swiss instantly agreed, then hoarded the light-speed technology from the rest of the world, insisting that a unified world government be set up before they would disclose the gift. Europe agreed, but the rest of the world governments did not. This invariably started World War Three.

Realizing their mistake, the javorans contracted the sophilians to assist the Swiss in their defense of the new technology and goals for a peaceful and unified Earth. The sophilians sent their finest warriors, the Guardians.
The Guardians were successful in their defense of the Swiss and Europe. Continental militaries were no match. On December 3, 2253, the collective governmental militaries of the world surrendered to the Guardians. On January 28, 2254 The United Earth Civilization Act was ratified, gathering every independent country of the world into one collective world democracy called The Confederate World Parliament. Now the Swiss and Europe shared the wealth. As the population of Earth realized a dream come true, the ability to travel to other stars, a general sense of unlimited human possibility spread throughout the race.

The mystique of such accomplished psychic abilities within the sophilian Guardians caught popular praise of the humans. After long professed admiration and requests, the sophilians decided to concede, and began teaching the skills of the Guardians.

In just a few short years the Guardian schools gained the reputation among humans as a new religion, although those who were chosen to be the first human Guardians knew the difference. By the late 2200's the Guardians had become a full blown religion.

Guardian monasteries flourished throughout the world, but the human Guardians limited themselves to remaining only on Earth for the sake of humility. The ratio of new Guardian applicants to total Earth population began to grow from 1:25,000,000 to 1:10,000.

A system of finding and training new Guardians was set in order to weed out the undesirable applicants and preserve the oath in its purest form. The Guardians believe that every individual sentient life form has the possibility of becoming Guardian, but they only accept those that "felt the call." The "call" is a psychic message that only Guardians to be can feel. And each individual must prove that he or she has felt the call. Most typically, an individual would feel the call around the age of 2 or 3. At age 5, those sensitive and qualifying children would be accepted into a monastery for regular scholastic education, and training as a guardian.

By the year 2290 the new government had become so tight knit as result of Earth entering into the galactic political arena, that on January 1, 2300 The Confederate World Parliament was absolved and a new government was set as adjustment to the needs of this new Earth, and was called The United Earth Confederation.

There was however, a small war against a faction consisting of loyal supporters and partisans of the old Parliament. This war was settled when the opposing faction left Earth in The Great Convoy. It was a convoy of 256 starships carrying approximately twenty-billion humans. Fifteen years later, it was recorded that this convoy had settled in the Varu star system, but little else was known about them. This
convoy took with it a faction of guardians that were still loyal to the old Parliament, leaving more than 75% of all known human guardians on Earth. Each guardian faction considered themselves to be the original, The Guardian. From this separation, the oath evolved into two distinctly different philosophies. The guardian faction that fled Earth for the Varu star system began to hold supremacy and power as their greatest concern as the Varu settlement was edging its way into an Empire-hood. The guardian faction that remained on Earth continued with the old ways considering truth and life as most precious. While the guardians of truth and life taught The Disciplines in the old way of devotion, honor, and truth, taking many years to train an individual to the point where he or she could be considered Guardian—the guardians of supremacy and power infused the use of drugs to speed the process.

The problem with this was that if the drugs were to be taken away, they would loose more than half of their powers. But for the guardians on Earth, the tradition of monastery devotion was unshakable. Discipline verses Power.

**The Guardian Oath**

(of truth and life)
I am made of that which is Discipline.
Disciple makes Knowledge into Excellence.
Excellence becomes Peace.
Peace breeds Life.
Life is Truth.
I am made of that which is Truth.
Truth gives Peace to the Body.
The Body is Life to the Mind.
The Mind feels the vibration of the Spirit.
The Spirit is the essence of Life.
I am made of that which is Life.

**The Guardian Oath**

(of supremacy and power)
I am made of that which is Power.
Power makes Excellence into Knowledge.
Knowledge becomes Passion.
Passion breeds Service.
Service is Supreme.
I am made of that which is Supreme.
Supremacy gives Strength to the Body.
The Body is Life to the Mind.
The Mind feeds the vibration of the Spirit.
The Spirit is the maker of Power.
I am made of that which is Power.
The effectiveness of a guardian's spell craft is regulated by how many Discipline Points (DP) the guardian wishes to use for the casting, and how many points the guardian has available.

In order to calculate your guardian's DP base multiple, take an average of your guardian's Intellect, Sense, Will, Perception, and Luck Major Scores.

Guardian Discipline Points

To find the initial number of DP, take your base multiple, and multiply by the roll of 1d4. This is the initial number of DP.

In order to increase your DP, use the PABICRN Equation found in Section V: Character Abilities. Use the equation in the same way that you would if you were adding Character Ability Base Multiples to your current Aptitude Percentage, except in this case you are adding DP Base Multiples to your current DP.

Unlike Character Ability Aptitude percentages, which are rolled against, Guardian DP are used as a stock number.

Whenever you want to use a Discipline it costs a given number of DP. For example, casting Essence is the first step that a guardian takes to open himself up to the other Disciplines; like priming an engine with fuel. A single use of Essence will last for 12 hours and costs 20 DP. Simply inform your Captain that you want to cast Essence, and subtract 20 DP from your current total. If your DP reaches 0, then your guardian is spent and must spend at least 4 hours in meditation or 8 hours sleeping to restore all DP. For each hour of meditation 25% of your total DP may be restored, and for each hour of sleep 12.5% of your total DP may be restored.

Remember though, nothing replaces sleep. You may restore DP only up to the maximum limit.

All Disciplines cost a minimum DP. A few have special minimums that are specified later in their descriptions. More than the minimum DP may be used to increase the effect of the Discipline being used as long as the guardian has points available.

A guardian can not obey both oaths at the same time. He or she obeys either the oath of truth and life, or the oath of supremacy and power. If ever your Captain decides that a guardian has used his Discipline contrary to the nature of his oath, the DP involved directly may be taken away permanently, and only regained by normal means. So be true to your school folks!

In order of importance, below is the Required List for both kind of guardian:

1) Religion
2) Military Basics
3) Etiquette
4) Acrobatics
5) Melee Weapon
6) Heavy Weapons Operations
7) History
8) Navigate Space
9) Military Presence
10) Program Computer
11) Communications
12) Stealth, [any but Street]
13) Weapons Lore
14) Logic
15) Discipline
In alphabetical order, below is the guardian Suggested List.

Cycle Riding
Government
Haggle
Leadership
Mathematics
Narcotics
Physics
Pilot Fighter
Pilot Heavy Craft
Pilot Light Craft
Pilot Medium Craft
Psychology
Repair Land Vehicle
Repair M.B.F. Engine
Reputation
Self Control
Starship Systems Operations
Stealth, Desert
Stealth, Jungle
Stealth, Mountain
Wet Ware Operations

Aside from a guardian’s Required and Suggested Lists, the special Disciplines are the most significant ability. A guardian may only begin to use his Disciplines after all Required Character Abilities are taken. Then the guardian may receive one Discipline for every Character Ability chosen from the guardian’s Suggested List.

For example, after a guardian has taken all Required Character Abilities, he must take one Character Ability from the Suggested List in order to receive the “A” Discipline, which is called Essence. Then to receive the “B” Discipline, called Prowess, take another Character Ability from the Suggested List; for the “C” Discipline, called Empathy, another Character Ability from the Suggested List; for the “D” Discipline, called Endurance, another from the Suggested List, and so on. In order to be able to cast all Disciplines a guardian must take all 15 Required Character Abilities, plus 20 from the Suggested List.

The nature of all Guardian Disciplines are grouped into three main Energies: Corporeal Energies (CE), Incorporeal Energies (IE), and Extra-corporeal Energies (ECE).

Disciplines governed under the Corporeal Energies, from least to greatest, are Prowess, Endurance, Biological Sustain, Control Consciousness, Minor Stasis, Cell Renewal, and Transmogrification.

Disciplines governed under the Incorporeal Energies, from least to greatest, are Empathy, Truth, Telepathy, Awareness, Focus, Sight, and Ethereal Suicide.

Disciplines governed under Extra-corporeal Energies, from least to greatest, are Essence, Telekinesis, Charm, Mind Domination, Electrical Attack, and Teleportation.

Description of Disciplines or Powers

A) Essence [ECE] gives the ability to manipulate the fabric of space and time to connect with their psychic energies. Essence must be used daily and before any other Discipline can be used; it is a charging process. To be able to use any other Discipline for an entire day the guardian must cast Essence
twice daily. The cost is 20 DP. The onset is 10 minutes of chanting the Oath. The duration is 12 hours. The range is self infliction.

B) Prowess (CE) increases Strength, or Agility Major Scores by one point for every 20 DP used. You may spend the minimum DP as many times as you are able, stacking the increased Major Score points up to the maximums of 20 in Strength, and 25 in Agility. Thus, if you wanted to raise your Strength by three points and raise your Agility by two points, the overall cost would be 100 DP. The onset is immediate. The duration is 1 hour per use. The range is self infliction.

C) Empathy (IE) gives the guardian the ability to know the feelings of any other being, animal, or object. The minimum cost is 20 DP. The range limit is ten yards. The duration is ten minutes. For each multiple of 20 DP used, you will get a more detailed idea of the monitored emotions. When the extended range is desired, the range may be doubled for each extra 10 DP used beyond the minimum 40. Or a greater degree to detail of the truth or falsehood becomes known for each extra 10 DP used beyond the minimum 40. But you must choose whether you want to extend the range, or increase the detail. Each level of detail observed is given to the player of the guardian as one descriptive statement per level of detail. Thus, if the guardian wishes to increase the level of detail by three levels (spending 70 DP) the Captain will give three descriptive statements referring to how the guardian is able to perceive truth or falsehood. This process of observation on the guardian's part is done by examining the observed individual's sub-text dialogue, subtle body language or gestures, or confidence with which the observed acts.

A second option of this Discipline is the ability to decipher secret codes that are written, spoken, or sign language. This method of using Truth cost a minimum of 80 DP.
F) Telepathy [IE] allows the guardian to speak to others with his mind. The only way that a two-way conversation can occur using Telepathy is if the other person has the ability as well. The only way to block a message being received is to cast a reversed version of Telepathy upon one's self. Basically, Telepathy only works to send messages and thoughts. The cost is 40 DP. More than one individual may be communicated with by spending 20 extra DP per extra individual. The onset is a minimum of 1 minute. The duration is the time spent in meditation. The range is one mile per 40 DP used.

G) Biological Sustain [CE] gives the ability to go without food, water, and sleep. A constant, normal body temperature is maintained with the exception of exposure to extreme heat or cold. A single use costs 40 DP. Using more than 40 DP at a single casting upon one's self does not increase the duration, or effect in any way. The duration is 24 hours. The range is self infliction, but can be cast upon other individuals by touch at the cost of 80 DP per extra individual.

H) Awareness [IE] gives the ability to predict situations, or the actions or statements of an individual. It gives the guardian the privilege of committing his actions is whatever segment of a combat round that he wishes, but does not increase the number of actions that the guardian may take in a single combat round. For example, given that there are four segments in a round, and a particularly agile guardian is allowed to commit two actions per round. Normally these two actions must be taken in the third, and fourth segments. But after casting Awareness, the guardian may manipulate what segments his two actions will take place. The cost for casting Awareness is 80 DP. Spending more than 80 DP does not increase any of the ability of this Discipline or Power. The onset is immediate. The duration is 6 hours. The range is self infliction.

I) Telekinesis [ECE] is the Discipline to lift and move objects with the mind starting at 10 pounds per 80 DP used. The weight allowance increases exponentially for each 80 DP used. The only way to combat the effects of Telekinesis is cast a reversed version of Telekinesis at an equal cost upon the object being moved. The onset is a minimum of 1 minute of meditation. The duration is the time spent in meditation. The range is equal to the caster's Will Major Score in yards.

J) Charm [ECE] gives the guardian the ability to bend another being’s will to that of the guardian’s. Upon casting, the being that is charmed will react as the guardian wishes and think that it is of their own volition. Charm is not a mind control, but a strong suggestion type of Discipline. The needs and desires of the guardian become
the needs and desires of the charmed individual, and act within their own free will to accomplish a deed which the guardian wants. The charmed individual is not controlled unconditionally. It is like assigning someone a task and allowing them to complete it in their own way, and they want to complete the task. The charmed individual doesn’t have to necessarily agree with or like the guardian, but decides that the task is the only thing that must be done. The guardian must be very careful morally with this discipline because no being will act against their nature. A suggestion through Charm that is against their nature will break the spell, and most often causes them to attack the caster in hateful revenge. Another guardian is immune to Charm.

Every victim gets a chance to avoid being effected by Charm. The victim compares his Will Major Score to that of the costing guardian’s. If the victim’s Will is greater than the guardian’s, then the victim gets a percent bonus equal to double the difference of the victim’s Will verses the guardian’s Will, which is applied to the victim’s Emotion Resistance.

If the victim’s Will is less than the guardian’s, then the victim gets a percent penalty equal to double the difference of the victim’s Will verses the guardian’s Will, which is applied to the victim’s Emotion Resistance. The cost for casting is 80 DP. The onset is a minimum of 1 minute. The duration is 6 hours. The range is by touch.

K) Cell Renewal [CE] brings the targeted individual 1d10 Biometer Health Points worth of healing per 100 DP used. The body part that is healed must be stated specifically. The onset is 1 round per 1d10. The duration is permanent. The range is skin touch. Cell Renewal may be reversed only for those guardians who follow the oath of power and supremacy.

L) Control Consciousness [CE] regulates the consciousness of the guardian. It has many options of effects.

The first effect is a trance like state where the guardian can cause an individual's heart rate, breathing, and biological needs to remain the same, but the brain activity slows to a point that he appears to be in a comatose state, even to the most advanced medical monitoring equipment. The guardian can revive the individual at any time that he wishes and may keep the individual in this trance for as long as he wishes. The individual effected must be an unsuspecting victim [surprised] or else the victim can not be effected at all. The cost of this option is 160 DP per casting. The range is skin touch. The onset is 2 segments of a round.

The second option is the ability to revive someone if unconscious from wounds. When the individual wakes up, he will be conscious, but incapacitated. If he is dead nothing will happen. This option costs a minimum of 160 DP and lasts for an equal number of minutes as the
The number of DP spent. The onset is 1 minute of meditation. The range is skin touch.

The third option is a hypnosis type of effect. The individual that is being cast upon must be a willing participant. This allows the guardian to delve into the conscious mind [not the subconscious] of the participant and read the thoughts, memories, emotions, and beliefs. The guardian may change any of these [except memories] as he wishes but only if the participant is willing. The guardian can not change memories, but can block them out of the participant’s mind by burying them deep in the sub-conscious, again, only if the participant is willing. If they are not willing, the mental link cannot be established, and they are totally aware of what was attempted. The cost for this third option is 160 DP. The duration is the time spent in meditation. The onset is 1 minute, and the range is skin touch.

MJ Focus [IE] is like a third eye that helps the guardian to react to situations that would normally surprise him, or to know about situations that would logically be impossible for him to know about, and his body reacts without thinking to instigate the best possible outcome.

Upon the moment that Focus is cast, the guardian is instantly all knowing of his physical surroundings and situations. The sequence of actions that a guardian states at the beginning of the round may, at the segment after the casting, be changed to a new action statement.

Focus controls the guardian’s actions instinctively, but it also obeys his commands. The guardian may also react against this better judgement instinct. The cost is 160 DP. The onset is 1 segment. The duration is 5 minutes. The range is self infliction.

MJ Sight [IE] gives the guardian the ability to teach The Disciplines to a pupil. When Sight is gained, the guardian may then, and only then, consider himself a full guardian, but not a Lord Guardian. The ability to teach others The Disciplines is absolutely dependent upon Sight. The number of pupils that a guardian may teach is equal to 1% of his total DP. For example, a guardian that has a total of 322 DP can teach a maximum of three pupils. The teaching of pupils is the only way for a guardian to gain new Disciplines beyond this point. So if you are not up to the burden of teaching, then you are not privileged to advance your own Disciplines. And remember, there are seven more Disciplines that you have not yet learned if you have not taken on pupils. The cost is
160 DP per day that your pupils are being taught. The onset is 5 minutes of chanting the oath while in meditation. The duration is 1 day. The range is vocal, sight, or telepathic communication with each student.

There is a second option of Sight, which is to see into the past, present, or future of an intimately known individual. The cost for seeing into the past or present is 160 DP. The cost for seeing into the future is 160 DP per week forward. With the minimum casting cost spent the guardian may only perceive the emotions of the individual in question. With 2x's the minimum casting cost the guardian may see the emotions, and the intentions of the individual; 3x's and the guardian may see the emotions, intentions, and the physical situation through the eyes of the individual in question; 4x's and the guardian may also hear through the individual's ears. The onset of this second option is 5 minutes of chanting the oath. The duration is the time spent in meditation. The range is unlimited distance between the caster and the observed individual, and is self inflicted.

[1] Mind Domination (ECE) allows the guardian to take control of the free will of any being or animal. Any being with a Will Major Score of 9 or greater is allowed to make an Emotion Resistance roll to avoid the effects. If the victim's Will is 8 or less, too bad! His mind now belongs to the guardian!

Other guardians are immune to Mind Domination. If a guardian is able to take control of an individual's mind, they are dominated unconditionally. The guardian can then control the victim's thoughts, emotions, actions, beliefs, memories, anything for the duration of the casting. The guardian can crush the victim's cerebral cortex, brain stem, medulla, cerebellum, or any other part of the brain. Remember, not all races have the same type of brain lobes, but all work basically the same. The guardian can cause the victim to go insane, or claw out his own eyes, or stand motionless, or thoughtless. The guardian can turn an individual's mind into scrambled eggs if he so desires. So, guardians, BE CAREFUL! It could be very easy to permanently lose DP for bad behavior by taking this discipline too far. The cost is 400 DP. The onset is immediate. The duration is the time spent in casting. If brain damage or death occurs the duration is permanent. Dead is dead. The range is the maximum distance at which the guardian can clearly see the pupils of the victim's eyes.

P) Minor Stasis (CE) gives the ability to enter a trance that shuts down all bodily and mental functions. This discipline is useful for deep space voyages that last for extremely long periods of time. A guardian may stay in this trance indefinitely and can arouse himself at any time. He is totally unaware of his surroundings while in Minor
Stasis must be protected. However, combining Focus with Minor Stasis acts as an alarm system inside the guardian’s mind.

The basic process of this combination is for the guardian to first cast Essence, then cast Focus at double the normal cost, then cast Minor Stasis. As focus normally works for a maximum of one round, in combination with Minor Stasis it sits dormant until there is some significant danger to the guardian either physically, mentally, or spiritually, and automatically raises him and causes him to react instinctively to the threat. The combination is a security system. The combination does not allow the guardian to be aware of his surroundings, but he does not need a protector as he would if he were using Minor Stasis alone. In combination, these two Disciplines have an indefinite duration, but are concealed upon arousal of the guardian. If the guardian should choose not to use the combination, electing to have a protector present, then it is a good idea on the guardian’s part to set a safe word or phrase that the protector may use to rouse the guardian, for example the guardian’s name. Otherwise, he can not be brought out of Minor Stasis except upon his own volition. The cost is 400 DP. The onset is 1 hour of chanting the oath. The duration is indefinite. The range is self infliction.

**Q) Electrical Attack [ECE]**

causes Extra-corporeal Energy in the form of electricity to shoot from the guardian’s finger tips causing 1d10 points of damage per 400 DP used, to a targeted individual’s Biometer Health Points. The body part that is attacked must be stated specifically, or an average damage will be given to the victim. If the targeted individual can be seen with a straight line vision, the attack will not miss. If the targeted individual is hidden, or the straight line vision is blocked in some way then the guardian must make a Rumble Melee attack roll, thus allowing the targeted individual to make a Rumble Melee defense roll. If the defense roll is successful then the targeted individual has dodged and no direct damage is delivered and the damage then turns back against the costing guardian. Otherwise the guardian will hit. Other guardians are immune to Electrical Attack. The cost is 400 DP per 1d10 worth of damage to a maximum of 1600 DP for 4d10 points worth of damage. The onset is immediate but takes a minimum of 2 rounds (8 segments) to cost. Physical damage that occurs is permanent, but can be healed. The range is 20 yards.

**R) Transmogrification [CEJ** is a shape changing Discipline. The guardian can change himself into the shape of any well known being or animal. The guardian may then take advantage of any of the being’s physical (but not mental) characteristics.

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cost is 400 DP. The onset is 5 minutes of chanting the oath. The duration is 10 hours. The range is self infliction, or a willing individual by touch at double the normal cost.

**Teleportation (ECT)** gives the guardian the Discipline or Power to transport any being or object up to 100 pounds per 200 DP used, from his present place in the physical third dimension, to any other place in the physical third dimension with which he is very familiar.

If the Captain decides that the guardian is not familiar enough, the teleportation can not be made. If the guardian attempts to teleport more pounds without paying for them, the teleportation can not be made, and the DP are lost.

The teleporting guardian must be very specific as to where the teleportation will travel to, or else the Captain may choose randomly.

The onset is 1 round. The duration is instantaneous. The range is 1,000 miles per 200 DP.

**Ethereal Suicide (II)** gives the guardian the ability to release his spirit from his body. This means death. And dead is dead. Thus, the guardian kills himself and gains free will in a spiritual realm. The guardian can then travel anywhere in the physical third dimension and become semi-visible and be heard from speech. However, all other previous abilities are lost permanently, with the exception of the Incorporeal Energies. The guardian can then later release himself into the paradise at will, but can never return. However, in order to stay outside of paradise the guardian must have some purpose or goal to complete.

The cost is 500 DP. The onset is 1 round of chanting the oath. The duration is permanent. The range is self infliction.

**Hunters**

Hunters come in two different types, that of a wilderness hunter, and that of a man hunter. Wilderness hunters are characters who live their lives in solitude, but can also be found with small groups of people, or a family. They are best characterized as a mountain man of the wild North American territories of the 17th and 18th centuries, Earth. They trap, net, track, and hunt wild game animals. They use every part of the animals that they kill; skin for clothing, meat for food, sinew as string, bones for tools, fat for soap and glue, etc. On a rare occasion you might see one wandering around in a rural town or village, gathering supplies that they can not normally find or make for themselves.

The most common race to be found as a wilderness hunter are the Frints on Vonsow.

Man hunters (or bounty hunters) are characters who hire themselves out as bounty collectors that travel the galaxy in solitude or in small
packs. They are usually left over, forgotten soldiers that made the self discovery that they were too dangerous to exist in normal society, and therefore began to hire themselves out to the highest bidder as a rifle for hire. They do their job of hunting men to either bring them back alive, or "eliminate" the malefactor. Most often they are hired by Mega-corporations, or by Mafia families as "special employees."

There are independent hunters that do not sell themselves out to companies. They tend to have an agent that gathers information as to where the next job is, and sells them the information for a percentage of the profit. These types of agents are usually considered as the only person that a hunter can trust, if he can trust anyone. And it is usually a give and take relationship, as the hunter finds it difficult to find jobs without the agent, the agent needs to find jobs for the hunter in order to get paid. Either way, they feed off of each other's blood sucking skills.

These agents and hunters that work together typically can not get normal jobs related to their expertise because of some sort of past criminal record, whether or not they have paid the debt, this criminal record keeps them from finding the easy life.

Like a city clansman, the man hunter and his agent informant usually have a criminal record. 50% of them do. To find out if your hunter has a criminal record or not, roll percentile dice (2d10) less than 50% to make sure that your record is clean. If you roll high, then to find out what you did wrong ask your Captain.

Many times it is important to have a base of operations. Other times it is best to have your stuff in a duffle bag, because at the last minute you might get a call that your target is near by and on the move.

A light starship is usually a home on engines. A light starship, if you can afford it or steal it, is better than any side arm that you could ever want.

All in all, the most important aspect of being a man hunter is to never burn your employment bridges. If you can't finish a job, tell your boss. But if he has prepaid you, well, you better be prepared to pay him back- and then some as a bribe to keep other man hunters from chasing your head. As far as bribes go, if your boss has paid you to find and kill someone, and after you have found your target—then suppose your target offers you more money to let him go. Is it going to be worth it? It is true that a man hunter does not have ANY honest loyalties, but try to use your head and keep your professional attitude. Kill your targets.
In order of importance, below are the Required Lists for each kind of hunter.

**Wilderness Hunter**
1) Endurance
2) Farming
3) Animal Care
4) Animal Riding
5) Stealth (any but Street)
6) Melee Weapon
7) Hunting
8) Dodge
9) Hand To Hand
10)*Infantry Weapon

**Man Hunter**
1) Infantry Weapon
2) Dodge
3) Street Stealth
4) Vehicle Driving
5) Basic Tech
6) Computer Programming
7) Starship Systems Ops.
8) Navigate Space
9) Pilot Light Craft
10)*Hunting

In alphabetical order, below are the Suggested Lists for each kind of hunter.

**Wilderness Hunter**
Basic Tech
Culinary Arts
Dancing, Folk
Disguise
Gambling
Graphic Design
Haggle
Land Vehicle Engine Repair
Music, Folk
Religion
Vehicle Driving

**Man Hunter**
Acrobatics
Communications
Cycle Riding
Disguise
Heavy Weapons Operations
Intimidation

**Linguistics**
Lip Reading
Melee Weapon
Military Basics
Pilot Medium Craft
Repair Craft Systems
Repair Hypertransit Engine
Repair M.B.F. Engine
Repair Spatiotemporal Engine
Reputation
Robotics
Sting
Weapons Lore
Wet Ware Operations

**Martial Artist**

A martial artist is a character that uses his or her body as a weapon and a shield. A properly trained martial artist should not have any need for technological equipment in the aspect of self defense. In any threatening situation martial artists will first try to reason with their foe in order to preserve peace. But if a violent situation is unavoidable, martial artists will try and advise their assailant of the danger that they are entering into by attacking, or forcing a fight with a martial artist. Not that the martial artist's ego is large, but that he must make his opponent aware of the possible consequences. If the opponent presses the martial artist into a fight, the martial artist's mind and body act and react from a highly specialized combat training instinct. Many competition martial artists call this instinct "the groove," or "the flow."

As the intensity of a martial artist's opponent increases, so does the martial
As the martial artist gets further into "the groove," the faster his motions, the more accurate his attacks, the more power behind his blows, the more difficult it becomes to get through his defenses. It has been documented that some martial artists of the enconzoid style "enconi-atomic" could become so focused into their art that they were actually able to absorb an energy weapon's beam by sheer force of will.

As all martial artists strive to hone their bodies and minds to better their artistry, they also have some code of ethics that relates directly to an individual's spirit.

When using the Martial Arts Character Ability in the Rumble & Melee Equations, the table below shows how the ability's effects are administered.

In the first column is listed the attack move options, the second column lists how many segments of a round each attack form requires, the third column is listed how much damage each attack does, and the fourth column is listed a percentage to knock out (KO) your opponent if using pressure points or choke holds.

<table>
<thead>
<tr>
<th>Attack Move Options</th>
<th>Segments of a Round</th>
<th>Damage</th>
<th>Percentage to KO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move 1</td>
<td>2</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Move 2</td>
<td>3</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>Move 3</td>
<td>4</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>
### Martial Arts Chart

<table>
<thead>
<tr>
<th>Attack Forms</th>
<th># of attacks/segment</th>
<th>Damage</th>
<th>% to KO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attack Form A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Punch</td>
<td>3</td>
<td>1d4</td>
<td>10%</td>
</tr>
<tr>
<td>Any Fist Strike</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attack Form B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low or Mid Kicks</td>
<td>2</td>
<td>1d6</td>
<td>20%</td>
</tr>
<tr>
<td>(including front, back, hook, and side kicks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attack Form C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Leg Sweep</td>
<td>1</td>
<td>1d6</td>
<td>30%</td>
</tr>
<tr>
<td>Joint Break</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grab and Hold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grab and Throw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure Knock Out or Chokes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attack Form D</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Kicks</td>
<td>1</td>
<td>1d10</td>
<td>40%</td>
</tr>
<tr>
<td>(Including front, back, hook, round house, back spin, crescent, and axe kicks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attack Form E</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flying Side Kick</td>
<td>1/2</td>
<td>1d12</td>
<td>50%</td>
</tr>
<tr>
<td>Jumping Double Side Kick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jumping Double Back Spin Kick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thunder Kick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attack Form F</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karma Punch</td>
<td>1/3</td>
<td>1d12</td>
<td>60%</td>
</tr>
<tr>
<td>Karma Strike</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karma Kick</td>
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</table>

There is a sub-title of the martial artist called a Mega-bot Pilot. A Mega-bot is a giant robot that is armored, carries starship weapons, and is piloted by either a virtual reality cockpit, or wet ware hook ups. The virtual reality style of cockpit is operated by standing on a multi-directional treadmill and having thin cables attached to a special pilot suit. Putting tension upon a cable activates a system of servos that "steer" the megobot. This style of megobot is piloted with martial arts techniques. Another style of megobot is one that contains a single pilot's chair and wet ware hook ups linked directly to the on board computer. But this style of megobot is piloted with wet ware Operations. Both types of Mega-bot require the pilot to have an in depth knowledge and
training of martial arts. More often than not, a Mega-bot Pilot is more highly skilled of a martial artist than a non Mega-bot Pilot because of the need to control such a colossal piece of machinery. A Mega-bot Pilot's sense of body position must not only take into consideration what his own body placement and position is, but also placement and position of the Mega-bot's body. This is a skill that must be trained for.

When operating and fighting with a Mega-bot, the martial artist must use the Mechanized Attack and Defense Equations and list their Martial Arts Ability Aptitude percentage in the "other tech" space, even though the Martial Arts Ability Aptitude percentage is normally only used in the Rumble & Melee Attack and Defense Equations.

Below is a list of martial art styles from around the galaxy. Note that only martial artists are allowed access to the specific styles. Some of you Earthling human players are going to wonder why one Earth style or another is not included in the list. The answer is simple, there are too many to list, so the most popular will have to do. Understanding that, remember that your Captain reserves the right to add or delete any style of martial arts. If an addition is made, it must realistically reflect the style's goals, beliefs, and methods, and its effectiveness must be of a relative comparison to the other styles listed.

The format of the listings reads first a basic explanation of the style, then lists d10 bonuses to specific attack forms which are applied to the Rumble & Melee Attack Equation, then lists d10 bonuses for the Rumble & Melee Defense Equation, and finally whether or not the style inflicts double damage.

Aikido is a human martial art originating on Earth, which is passive in nature, and characterized by its reliance upon the opponent's inertia to administer counter attacks like throws, dodges, blocks, and sweeps. Thus, it is an art that is highly defensive. As for attacking the style favors punches and strikes. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Attack Form C
+2d10 to Rumble & Melee Defenses

Encoon-da is an encoonoid art originating from their later slave days on Rastel. It is characterized by powerfully balanced stances, and training that grants the martial artist great accuracy with the faster attack forms such as regular punches and kicks. A favorite move is to make so many attacks upon the opponent that there is little possibility for returned attacks or defense. Another is to deliver so much damage as to punch or kick threw the opponent's block. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Attack Form B
+1d10 to Attack Form F
X2 damage for Attack Forms A, B, and F.
Lambrus is an ancient tribal javaran style from the northern territories of L'sipponof. It is characterized by graceful movements, launching from low crouching stances, by flaring the muscles in the back and arms, lower throat breath noises, and the showing of teeth. A favorite attack move is to grab the opponent, face him holding his head in your arms and kick the stomach to scratch lacerations and spill the guts. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Attack Form B
+1d10 to Attack Form C
X2 damage for Attack Forms A, B, and C.

Jutekay is a rastelloc martial art originating on Rastel, and often employs melee weapons such as daggers into their battle technique. It is characterized by draining as much blood from the opponent as possible before the opponent is unconscious or dead. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Rumble & Melee Defenses
+2d10 to Rumble & Melee Attack when using a Melee Weapon

Kung-Fu is a graceful human art from Earth, that uses fluid motion followed by explosive and precise attacks. It is a favorite with Mega-bot pilots. It is characterized by focusing on the spiritual nature of animals such as the crane, the tiger, the bull, or the dragon. A favorite attack move is to choose an animal fighting style and direct the attack in such a way that the opponent will quickly be incapacitated, such as blinding the opponent’s eyes, breaking the opponent’s joints, or taking a weapon out of their hands to use it against them. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Attack Form B
+1d10 to Attack Form C
+1d10 to Rumble & Melee Defenses
X2 damage for Attack Form C

Kung-Fu is the most widely known martial arts style in the javaran culture.
It originates from I'sipponcof and is characterized by its straight forward positioned, wide ready stances with arms relaxed at the sides in order to make the opponent think that the martial artist is a weak fighter. Bonuses are as follows:

+1d10 to Attack Form C
+2d10 to Attack Form F
+1d10 to Rumble & Melee Defenses

Masablen is an enconozoid knife fighting style that is very rigid with ceremonial tradition from their earlier slave days on Rastel. In its origin it is a near copy of the rastelloco style Grenk-Gau characterized wielding ceremonial twelve inch daggers called Blen blades. The initiating opponent calls out and formally challenges another to single combat. Ceremonially the fight is to the death. The difference between Masablen and Grenk-Gau is that Masablen is intended to slice one's opponent to bleed to death. Thrusting stabs are considered too much like Grenk-Gau which the enconozoids consider to be a cowardly display of butchery. Historically, the style was created by the enconozoids watching their rastelloco slave masters, then modifying the fighting style to include grabs, holds, sweeps, and throws. Then a tradition was started that when an enconozoid slave was trying to free himself from his rastelloco master, the main goal was not just to kill him, but also humiliate him. Thus, precision blade cuts rather than thrusting stabs became "the way of the Blen blade," which is the literal translation of masablen in the rastelloco language. Bonuses are as follows:

+1d10 to Attack Form C
+1d10 to Rumble & Melee Defenses
+2d10 to Rumble & Melee Attack when using a Melee Weapon

Nab-haji Ah is a javoran sport martial art style from the eastern countries of I'sipponcof. It is characterized by speedy movements that deliver well calculated attacks, but little damage. It is an art designed to score points rather than slay enemies. When used with another style Nah-haji Ah can prove to be a formidable addition to one's fighting style. Bonuses are as follows:

+2d10 to Attack Form A
+1d10 to Attack Form C
+1d10 to Rumble & Melee Defenses

Sbow_ Stik is a breorgan style originating on Creegree. It is characterized by bobbing and weaving the head while producing growls, or bouncing between attacks. A favorite attack move is not attacking until after the opponent has attacked, and bobbing head while growling to intimidate opponent into making a mistake then exploiting the opening. Bonuses are as follows:

+1d10 to Attack Form B
+1d10 to Attack Form C
+1d10 to Rumble & Melee Defenses
X2 damage for Attack Forms B and C
Swast-ha key is a grastelionk martial art originating on Laracor. It is characterized by the philosophies and mimic of "shifting sand." Attacks are graceful, circling movements, constantly defending and learning the weaknesses of one's opponent. Poison sleep dust blown into the opponent's face is often used. A philosophy surrounding this is, "If one does not see the wind, there will be dust in his eyes." The traditional dust is made from crushing the drick leaves of a plant called megro, that is found only on Laracor, in the deep deserts. It can not be cultivated, but must be found growing naturally. Megro dust is 95% effective on all races. Bonuses are as follows:

+2d10 to Attack Form D
+2d10 to Rumble & Melee Defenses

Megre is a primitive rastelloc martial art originating on Hostel. It is characterized by low stances, slashing with claws, and biting. No kicks better than Attack Form B may be made, but +1d12 to all punches when claws are used. Also, biting is considered an Attack Form D move. A favorite attack move is to tear open the flesh of one's opponent with claws, or piercing arteries with teeth. Bonuses are as follows:

+1d10 to Attack Form A
+1d10 to Attack Form C
+1d10 to Attack Form E
X2 Damage for Attack Forms A, C, and E

Mae_D'oca is a delac-benaton ceremonial fighting style originating on Dursy. It is characterized by the martial artist building up spiritual power through having sex before combat. Traditionally, the combatants fight in the nude to surrender. Favorite moves include many forms of grappling. Bonuses are as follows:

+2d10 to Attack Form D
+2d10 to Rumble & Melee Defenses

In order of importance, below are the Required lists for both martial artist and mega-bot pilot.

Martial_Artist
1) Dodge
2) Religion
3) Etiquette
4) Endurance
5) Self Control
6) Dancing, any
7) Acrobatics
8) Melee Weapon
9) Stealth (any style)
10) Martial Arts
11) Military Basics
12) Infantry Weapons
13) Heavy Weapons Operations
14) Military Presence
15) MegaBot Operations

In alphabetical order, below is both the martial artist and mega-bot pilot suggested list.

Acting
Animal Care
Animal Riding
Basic Tech
Communications
Cosmetics
Culinary Arts
Cycle Riding
Dancing, Folk
Dancing, Street
Disguise
Farming
Negotiation
History
Intimidation
Leadership
Linguistics
Lip Reading
Literature
Logic
Medical
Melee Weapons
Military Basics
Military Presence
Music, Classical
Music, Folk
Music, Street
Pilot Light Craft
Program Computer
Repair [any style]
Reputation
Seduction
Vehicle Driving
Weapons Lore
Wet Ware Operations

Pilot:

A pilot is a character that flies aircraft and starships, but generally specializes in one style, usually fighter aircraft or starfighters. There are 2 different categories of crafts: aircraft and starship. There is no military training required to pilot light aircraft, but you must have a basic pilot’s license. To pilot fighter aircraft, heavy aircraft, Starfighters, or Heavy Starships, military training is required to earn a license. The pilot required list states the order in which an aircraft pilot may earn different pilot’s licenses.

Next there are starship pilots. A pilot of light or medium starships is required to have a light aircraft license first, then they may earn a light or medium starship license, all without military experience. However, starfighters and heavy starships require the pilot to have earned a pilot’s license for 1) light aircraft, 2) light or medium starship, and 3) military training. Only after the pilot has earned all of these qualifications and required licenses is the pilot allowed to get the military training to pilot a starfighter or heavy starship, at which point, the pilot would also be considered as a ranking officer.

All styles of piloting are used in Mechanized Attack and Defense Equations.

Rarely will you ever find a starship pilot that has come straight out of training and be able to accept an officer’s
rank other than Ensign or Lieutenant. This is because there are so many required Character Abilities that it is highly improbable for any character to be able to afford all of them with their first round grant of Initial Number of Abilities (governed by Sense Major Score). To the left of each numbered Required Character Ability is listed a rank that your character is assigned to if he or she must stop at any point within the Required List for lack of Initial Number of Ability points.

Basic Pilot’s License

In order of importance, below is the Required List for a basic pilot’s license.

1) Mathematics
2) Program Computer
3) Basic Tech
4) Dodge
5) Physics
6) Communications
7) Vehicle Driving
8) Self Control
9) Logic
10) Pilot Light Craft

After all basic pilot’s license Required List abilities have been taken, you may upgrade your license to class B or class A.

Class A Pilot’s License

In order of importance, below is the extended Required List for a class A pilot’s license, and corresponding ranks.

CT 1) Military Basics
ENSEC 2) Infantry Weapon
ENSEC 3) Military Presence
ENSEC 4) Starship Systems Ops.
ENFC 5) Space Navigation
ENFC 6) Heavy Weapons Ops.
LTSC 7) Pilot Fighter Craft

In alphabetical order, below is the pilot Suggested List.

Culinary Arts
Cycle Riding
Dancing, Street
Endurance
Hand To Hand
Leadership
Photography
Psychology
Repair Craft Systems
Repair Hypertransit Engine
Repair M.B.F. Engine
Repair Sonic Engine
Repair Spatiotemporal Engine
Reputation
Robotics
Heavy Weapons Operations
Wet Ware Operations

Programmer

A programmer is a character that uses computers to do just about everything. They design programs, communicate through their computer on the information highway, infiltrate programs or main frames of competing programmers or companies, and just about anything that a computer is used. They are masters of electronic computation.

There are five basic Character Abilities that allow
programmers to do their job. Those Character Abilities are Program Computer (which is the most important), Basic Tech, Wet Ware Operations, Wet Ware Tech, and Robotics. Also, because robots, basic or free thinkers, are considered to be of a computer intelligence, as they "think" from within programs, they are included into the realm of expertise of a programmer. And as a robot's body is composed of computer-like equipment, programmers are also the ones who repair them. Program Computer gives the ability to program, re-program, de-program, or infiltrate [hacking or pirating] locked programs, computer functions or memory. This includes the use of keyboard or vocal terminals, and hard ware or soft ware memory. This does not include advanced neuro-computing or free thinking robots. With a successful Ability Aptitude roll you require one hour per security level program within the main memory core to be able to hack your way through all securities. If you are writing or changing a program the time requirement is equal to ten times the complexity level in hours. To do this, write out an explanation in exact detail of what functions your program contains, and your Captain will judge the complexity level. Also, at that time, your Captain will issue you an adjustment, either as a bonus or a penalty, towards your Computer Programming Ability Aptitude percentage, which you must roll against to find out if your program is going to be successful or not. For more details see the Programming Chapter.

In order of importance, below is the Required List for a programmer.
1) Mathematics
2) Linguistics
3) Basic Tech
4) Program Computer
5) Research
6) Star System Trade Market
7) Logic
8) Graphic Design
9) Robotics
10) Wet Ware Operations

In alphabetical order, below is the programmer Suggested List.
Accounting
Acting
Advocacy
Communications
Cycle Riding
Dancing, Street
Disguise
Dodge
Engineering
Etiquette
Forgery
Gambling
Government
Haggle
History
Lip Reading
Literature
Mega-bot Operations
Narcotics
Physics
Photography
Pilot Light Craft
Psychology
Reputation
Starship Systems Operations
Street Stealth
Vehicle Driving
**Soldier:**

A soldier is any character that serves in some sort of military organization. The best way to explain what is expected of a soldier the character Abilities that are most basic to a soldier are written below.

Rarely will you ever find a soldier that has come straight out of training and be able to accept an officer’s rank. This is because there are so many Required Character Abilities that it is highly improbable for any character to be able to afford all of them with their first round grant of Initial Number of Abilities (governed by Sense Major Score). To the left of each numbered Required Character Ability is listed a rank that your character is assigned to if he or she must stop at any point within the Required List for lack of Initial Number of Ability points.

In order of importance, below is the Required List for a soldier.

| PV1 | 1) Military Basics |
| PV1 | 2) Stealth (any but Street) |
| PV1 | 3) Self Control |
| PV1 | 4) Repair (any) |
| PV2 | 5) Communications |
| PV2 | 6) Repair (any) |
| PV3 | 7) Military Presence |
| PV3 | 8) Leadership |
| CORP | 9) Intimidation |
| CORP | 10) Weapons Lore |

Abilities chosen from the Suggested List. Advancement through ranks is as follows:

11=CORP, 12=CORP, 13=SGT, 14=SGT, 15=SGT, 16=SGT, 17=LTSC, 18=LTSC, 19=LTSC, 20=LTSC, 21=LTFC, 22=LTFC, 23=LTFC, 24=LTFC, 25=CAPI, 26=CAPI, 27=LT COL, 28=COL, 29=BRIG GEN, 30=GEN, 31=Sr GEN, 32=FIELD GEN, 33=General of the Army.

In alphabetical order, below is the soldier Suggested List.

Accounting
Advocacy
Demolition
Disguise
Forensics
Government
History
Linguistics
Literature
Logic
Martial Arts
Mathematics
Medical
Navigate Space
Pilot Light Craft
Planetology
Psychology
Reputation
Research
Star System Trade Market
Starship Systems Operations
Stealth, Desert
Stealth, Mountain
Stealth, Jungle
Xenology
<table>
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<tr>
<th>Character Ability</th>
<th>Cost</th>
<th>Base Equations</th>
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<tbody>
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<td>Accounting</td>
<td>10</td>
<td>Intellect</td>
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<tr>
<td>Acrobatics</td>
<td>12</td>
<td>BODY</td>
</tr>
<tr>
<td>Acting</td>
<td>12</td>
<td>MIND</td>
</tr>
<tr>
<td>Advocates</td>
<td>14</td>
<td>MIND</td>
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<tr>
<td>Animal Care</td>
<td>8</td>
<td>Sense</td>
</tr>
<tr>
<td>Animal Riding</td>
<td>12</td>
<td>Agility</td>
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<tr>
<td>Anthropology</td>
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<td>Intellect</td>
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<tr>
<td>Basic Tech</td>
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<td>Sense</td>
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<tr>
<td>Biology</td>
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<td>Intellect</td>
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<tr>
<td>Chemistry</td>
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<td>Communications</td>
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<td>Cosmetics</td>
<td>7</td>
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<tr>
<td>Culinary Arts</td>
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<td>Sense</td>
</tr>
<tr>
<td>Cycle Riding</td>
<td>9</td>
<td>SPIRIT</td>
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<tr>
<td>Dancing, Classical</td>
<td>15</td>
<td>Avg. ALL</td>
</tr>
<tr>
<td>Dancing, Folk</td>
<td>10</td>
<td>Sense</td>
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<tr>
<td>Dancing, Street</td>
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<td>Looks</td>
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<tr>
<td>Demolition</td>
<td>10</td>
<td>Intellect</td>
</tr>
<tr>
<td>Discipline (Guardians only)</td>
<td>50</td>
<td>special</td>
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<tr>
<td>Disguise</td>
<td>8</td>
<td>Perception</td>
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<tr>
<td>Dodge</td>
<td>10</td>
<td>Agility</td>
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<td>Endurance</td>
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<td>Stamina</td>
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<td>Engineering</td>
<td>15</td>
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<td>Espionage</td>
<td>15</td>
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<td>Etiquette</td>
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<td>Farming</td>
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<td>SPIRIT</td>
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<td>Gambling</td>
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<td>Graphic Design</td>
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<td>Hand To Hand</td>
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<td>History</td>
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<td>Hunting</td>
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<td>Will</td>
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<td>Leadership</td>
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<td>Linguistics</td>
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<td>Intellect</td>
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<td>Lip Reading</td>
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<td>Literature</td>
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<td>Logic</td>
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<td>Martial Arts</td>
<td>18</td>
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<td>Mathematics</td>
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<td>Medical</td>
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<td>Melee weapon</td>
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<td>Music, Folk</td>
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<td>Music, Street</td>
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<td>Narcotics</td>
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<td>Navigate Ocean</td>
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<td>Pilot Fighter Craft</td>
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<td>Pilot Heavy Craft</td>
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<td>Program Computer</td>
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<td>Psychology</td>
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<td>Religion</td>
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<td>Repair Craft Systems</td>
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<td>Repair Hypertransit Engine</td>
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<td>Repair Land Vehicle</td>
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<td>Repair M.S.F. Engine</td>
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I Think, Therefore, You Are.

by Erik W. Hayes

Of all things great and small it has always been a fleeting truth as to where humanity fits into the universe. Once it was believed that to travel beyond forty miles per hour would cause suffocation. The speed of sound was soon after broken allowing us to pass through the "envelope" to the other side with ease. The great thinker told us that if matter were to travel the speed of light it would transmute into pure energy, let alone that traveling faster than light was strictly impossible. But if nothing else, the human purpose has always been to go beyond our confines. We are different from all other life because we ask, is there nothing more?

These things and more ran circles through Donald's head, as he sat outside on the terrace at the Gemini Bar and Grill. He had read about the first aliens to make contact, their gift of light speed propulsion technology, and the third world war that united Earth into its present state of decay called the United Earth Confederation. Though this single Earth government had its advantages, such as allowing smooth trade with other star systems, individual countries still fought over petty claims to this and that. He had read about the second world war, and all of the atrocities that occurred then, and none of it could he fully grasp. It was all ancient history to him. The only things in Donald's life that really seemed to matter on a daily basis were that his ship was in prime condition, his interstellar
license was no longer in jeopardy, and that there was money in his pocket for another beer. Beer, if nothing else, was at least the one constant he could count on without a doubt. And still, he wondered to himself, is there nothing more? Is this all there is?

Donald took a long drink of his beer letting his cellular ring a second time before answering.

"Hello?"

"Donald? This is Thomas. I've got another job for you. When can you have your bird ready?"

"Hold on now, what's the job?"

"Simple delivery, that's all."

"What's the cargo?"

"Time displacement modules to be fitted to static-temporal engines. I've got two-hundred of them ready to roll."

"What's the destination?"

"The Boeing star base at Altair. Short trip. Just go, dump them, and back. Only 5.05 parsecs. You can make that in what, two months?"

"Two and a half."

"Well, then. I suppose you had better get going. Time is money."

"Wait a sec, Thomas. If I'm going to take this job, you're going to have to buy me some new shielding generators. I don't trust the one's I have now. They're too weak. If I'm going through Rastellar space, I want the best equipment your money can
buy. So it's an up grade, or a different pilot."

"Donny, come on, you know I can't afford that kind of hardware. Look, nobody is gonna board you as long as you keep the pedal to the metal. Just stay above minimum trans-light speeds and you're home free."

"Thomas, I heard on the news the other day that the Mantellac Empire has a new net device that can snatch a ship out of hypertransit speeds with relative ease. Now, if that's true, and they decide to try and catch me then I want to be able to defend myself. So you either give me my shields, and throw in a couple of missile racks, or it's no deal. Time displacement equipment is worth a lot, and personally, I don't enjoy being worth that much. If word should happen to get out that I'm hauling them, well hell. I'm sure some pirate out there could stand to pick a few credits by selling that info to the bad guys. You follow?"

"Yeah, sure thing. Listen, you really worry too much. All you have to do is..." Donald sealed his bid by hanging up. He knew that he was Thomas's best pilot for medium distance shipments. If Thomas really wanted Donald he would follow through with Donald's up grades. Donald drained his mug and waved to the waitress for another. His phone sat on the table ringing frantically. Donald was not going to indulge Thomas by answering a second time. There were more important things on his mind just now—he was still trying to get the name of that cute waitress.
Sarah Weaver checked over the inventory lists for the third time. This was to be her first trip this far from Earth. Her head was pounding. She decided to try and ease the pain by smoking yet another cigarette. For all her searching through the cargo hold of the tiny freighter, the inventory was still coming up short. She was able to account for all but hundred time displacement modules, but she could not find the airtight sealed shielding generators anywhere. And worse, there was also no sign of the eight racks of concussion missiles. Had could items that big just be missing? And why the hell would defense, technically, like that be on an inventory list with time displacement modules anyway? She thought either someone in acquisitions was playing a stupid joke, or she was in big trouble for having lost expensive equipment. Just then she heard someone whistling in the main companionway. She stepped on her cigarette and went to see who was there.

"Hello, may I help you?" asked Sarah. There standing back at her was a tall scruffy looking man wearing a leather jacket, and a side arm. His whistle dropped off in pitch as he locked at her, head to toe.

"I'm not sure. What would you help me with?" asked Sarah.

"Who are you?" she asked.

"Well, I'm the captain of this little bird." he said. "But you can call me Dan if you prefer."

"Ah, so you're Captain Jaremski. Captain, I'm Sarah Weaver, inventory and accounting. I'll be accompanying you on this
voyage. I believe my position's title is 'Observer.' If you have a few minutes, I would like to go over some inventory discrepancies with you."

Donald gave her an oily smile. "JAF0, eh?"

"I beg your pardon?" she said.

"Never mind. Sarah right?"

"I prefer Ms. Weaver, if you please." Her tone was one of finality.

"I see. Well I prefer Don, or Captain, or what ever you want to call me. You smoke, eh?"

"Well, um, yes..."

"Not anymore. This is a smoke free environment if you don't mind," Donald said sternly. "Smoke confuses the on board damage control systems."

"Oh, I see. I'll try and refrain."

"No. You'll smoke you lost one before we go. Now if you'll excuse me, there are some things that I need to take care of before the crew arrives. If you need anything, get it yourself."

"But Captain, there is a rather pressing matter concerning the inventory," said Sarah.

"Later," said Donald. He climbed the access ladder to the next deck and disappeared.

"What an arrogant jerk," thought Sarah, as she began searching for an accessible computer terminal.
Donald sat at the helm of the Agrippa scrolling the computer through the pre-launch check list. He had done it so many times that it was almost second nature, even though it was the computer that did most of the work. It involved little more than typing a return on the keyboard or giving the computer other specific instructions. Finishing that, he put on his intercom headset and called down to the engine room.

"Kurt, I need you on the bridge with the newest astrogation charts, asap," said Donald.

"Aye, Captain," came back over the intercom.

"Carrie, are you on headset?" asked Donald.

"Yeah, I'm right here," she replied.

"As soon as you and Harley are finished with the dock master, I want you to assemble the crew up here on the bridge," said Donald.

"Aye, Captain."

The computer gave a beep to signal its completion of the check list protocol. Donald called up the main menu and brought up the crew personal files. There were four "greenies" on board; crewman Indigo Vansaw, executive officer Sarah Weaver, co-pilot Harley Gulib, and computer expert Eli Nelson. Actually, the only one of them never to have been in space was Eli. Donald thought back to his first time away from Earth. He was fourteen and with his parents on their way to the Eden Star Base and Resort orbiting the moon. He was disappointed that they did not get down to the surface, but the ride away from the planet was just
about as much exhilaration as he could handle.

He looked at the pre-launch counter. Eight hours until departure. Just about enough time to grab a brew with the crew, then two and half months of sobriety. And though he had enough cryo-tubes for everyone, it was such a short voyage it almost didn’t seem worth it to prime them. But rules are rules, and the company required that cryo-tubes be ready for any crew member that requested them. He thought of his contract with the company. He had requested forfeiture of all spacefarer stock shares in exchange for ownership of the Agrippa. Their counter offer was that he must make fifty voyages in ten years before the bird was truly his. But no matter, he was almost half way there in four years. Then he could do just about any job that he wanted, and set up any contract that he wanted with his crew. And the best thing, was that he would then be free of any company law. No more deep space travel, no more required investigation of salvage, beacons, or alien life forms. All he really wanted to do was fly pleasure cruises to and from nearby space stations. And as most tourists only wanted a little spin out to the moon bases, well that type of flying was pure profit as it barely used even two percent of his fuel stores for an entire trip. And for space travel so simple he could get away with only a co-pilot. For all of the other positions he would merely buy some robots. But as it was, he was still a company Captain.

Harley poked her head in through the door and said, "Captain, the crew is assembled."
"Thanks. Harley. Drive, everyone. Grab your jackets, we're going out for our last decent meal before lift off. I treat." His offer was met by favorable appreciation. He intended dinner to be more than just a last good meal, but a time that his crew could relax and really be themselves. So often in the past he had noticed that crew members hid certain personality traits from him. If they were not given the chance to let their hair down around each other now and then, it almost always proved to be detrimental once out in the void and confined to close quarters. This way, the crew might be able to find out things about each other that might not come up in duty conversation later. But more importantly, he did not always trust the company generated personnel files. They did not let in the humanity of the person. He believed that the best way to understand someone was to see them after a few rounds at the bar. At least then he could delay the voyage if he found someone as incompatible, and have them replaced. A slight delay in schedule was one thing, but personal conflicts among the crew was another.

As they ate and drank together, he decided that he had been assigned a decent bunch of people. Harley, his co-pilot, he had met long before, and had hand picked for her unquestionable piloting abilities, and for her unrelenting sense of humor. Indigo seemed as though he was the type who really knew how to relax. He knew that he would have to watch that quality in Indigo or else Indigo might become prone to laziness. Eli seemed too eager to make friends. Perhaps that was why he was a
computer expert, because computers will be friends with anyone. But still, lack of social confidence was not enough reason to replace him. And then there was Sarah. He did not like Sarah at all. She was too aloof when not on duty, smoked, and was too much of a busy body with protocol. She was almost the exact opposite of Harley, and he knew that there might be problems. But Harley was too good to let go, and Sarah was sent by the company. As for Carrie and Kurt, he knew them well as they had been flying with him for almost two years. They were professionals when it was time, and excellent friends always. They knew when it was all right to call Donald by his first name. At any rate, he was satisfied with the crew, and decidedly just hoped for the best. He checked his watch. Four hours until their launch window. He paid the dinner check, and they all returned to the ship.

So far, in their seventh week of transit, things had been running smooth. Spatio-temporal engines were running with peak efficiency, astrogation computers seemed to be conversing almost constantly, and the video game competition among the crew was about to find its winner. That was part of the beauty of a job as a merchant spacefarer. Once the starship was set on its course, there was little else to do but monitor on board systems, read books, play video games, or play zero-G hand ball in the cargo hold. Sarah had finally stopped being a pain in the neck from lack of nicotine, and Donald was always sure to point out
the more interesting interstellar sights, like nebulae, asteroids, and odd comets. Of course the ship had to be brought down below light speed to actually see any of these, but Donald thought it a benefit to crew morale. And why not, it was a simple matter to reconfigure their trajectory, then speed up again. But no one appreciated it more than Indigo. The chance to see astronomical phenomena this close was, in his words, like getting a closer look at God.

It wasn't until they were passing the Sirius star system that the automated sensor sweeps detected something unusual. On the fourth moon of the third planet was liquid water. Liquid water! Only sixteen planets in the charted areas of the Milky Way were found to have naturally occurring liquid water. Of those, only four contained native life; the human homeworld Earth, the sophilian homeworld Philkron, the javoran homeworld i'siponcof, and the restelloc homeworld Rastel. All other planets containing liquid water had been artificially terra-formed to support life.

Donald ordered Harley to drop the Agrippa below light speed in order to get a better look.

"Captain, with all due respect, may I be the one to do the preliminary scans? I mean, I am the one who detected it first," said Indigo.

"I don't see why not. I tell you what, if it meets the minimum standards for terra-forming, then you can give it a name." said Donald.
"Aye, Captain," said Indigo. His fingers flew across his key board with the grace of a figure skater. The computer monitor flashed readings and maps, proposed atmospheric composition and density, temperature, axis and angle of inclination, rotational and revolution patterns. The crew stood in awe, looking over Indigo's shoulder as he carried out his survey.

"Oxygen, nitrogen, hydrogen, carbon... Gravity at a standard of 1.0002," reported Indigo. "Average surface temperature of 92.04 degrees Fahrenheit. Chlorophyll. Sir, we have another earth."

The crew burst into applause and cheers. Harley messsed Indigo's hair, while others slapped his shoulders and back.

"So, what are you going to name her?" asked Kurt.

"Vansaw, fourth moon of Indigo," he said.

"Can we attempt a landing?" asked Carrie.

"I think so. There are quite a few suitable spots," said Indigo.

"Well, everyone get your gear in order. Harley, I want you to plot us a landing solution," said Donald. "Indigo, I want a full report on any dangerous fauna and flora. Carrie, I'll need you to start getting a med-lab set up."

"Captain, if you don't mind, I'd like to be in charge of setting up our med-lab," said Sarah. "I think I'm the most qualified, being the only one with any quarantine training."

"Fine, Carrie, please assist her."
Orders were dispatched, the landing was made, samples were collected. Of those samples and specimens, only one was animal. They brought it on board easily. The thing did not put up any fight at all. It almost seemed tame. They wondered if it was intelligent at all. The thing had no centralized brain, but a very complex design of nervous centers throughout its body. It had a shell-like exoskeleton that seemed to be made from clay. The shell was smooth, almost like glass or ceramic. It had a red underbelly, which faded into creamy pink and white near the top of its back. The creature had no visible claws, nor teeth in its mouth. Its mouth was of particular interest to the crew because it had two lower jaws that hinged together between them, and hinged to the skull on either side. They decided to call it a tri-segmented jaw. The most interesting feature of the jaw was that it constantly mouthed at the air as if searching for food. The crew decided that it must be a primary consumer, because it apparently had no other species of animals on which to prey. First they offered it a branch from a tree. Sarah suggested that its lack of claws might make it very difficult to climb, and since it seemed to have no other predators that it was probably a ground animal, perhaps one that grazes. And sure enough, when they offered it a bunch of ground vegetation it ate heartily. But what surprised them the most was, later, while conducting soil analysis, the creature seemed to enjoy eating dirt over eating plants.

During the week that the crew spent on the moon's surface,
they noticed their new friend enjoyed following them everywhere. Sarah had done the necessary tests to make sure that there were no alien bacteria or virus that might affect a human, and decided that interaction with the animal was permitted. The crew began to see the creature somewhat like a pet, and Eli named him "Piggy" because of his near constant rooting, and eating of dirt.

At the end of the week, Donald decided that they had gathered enough information about the moon to lift off, and later dispatch better equipped scientists from the company. By this time, two more of these creatures joined them, and together they were affectionately called "the three little pigs."

But they did not look anything like pigs. Maybe they acted like pigs, but were shaped very differently. Front to back they measured about four feet long, and stood about three feet tall from stomach to back. As their legs were about three feet long, each, they stood nearly seven feet tall in total. They were round like a bowl turned upside-down. The interior of their mouths were brownish-pink, and smelled like fresh clay. Their heads were bullet shaped with the lips of all three jaw edges closing smoothly. Their heads and legs could be folded into their shells, and the shell would then seal tightly, like a turtle. This was apparently their only defensive costuming, but the crew wondered what they would need defense from. There were no other species of animal on the moon anywhere. So why would they have evolved in this way?

Kurt had been up studying the rotation patterns of the moon
in relation to the uninhabitable planet. The moon orbited the planet, and the planet orbited around two suns. The suns passed the planet back and forth between their gravity wells, causing the planet and its moon to orbit the suns in a figure eight pattern. Thus, twice each complete orbit, the planet and moon would be between the two suns and there would not be a single dark place anywhere. In fact, Kurt hypothesized that during that time when between the two suns, the surface temperature would rise well over two-hundred degrees. That would certainly be hot enough to kill off most plant life. But the animals did not need the plants, they preferred plain dirt, which would also make sense in their survival strategies. Not only that, but at such time that the heat index rises, the animals would be able to protect themselves against the rays of the suns by curling up into their shells. The shiny ceramic surfaces of their shells would then act as a reflector and barrier from the light and heat. Realizing all of this, Kurt made his report to the Captain.

"They wear the shells as protection from the suns, not from predators. It's the best logical reason for them to have evolved into what they are," said Kurt. "I say we take one back with us and have it studied."

"Well, Sarah has informed me that they don't seem to be any kind of a bio-hazard. But we can't load up on dirt enough to feed these things," said Donald. "We're going to have to put them into cryo-tubes. Can that be done, Sarah?"
"I don't see why not. Their nervous systems are not primitive, but similar to human. The computers can easily detect and compensate for any circulatory and respiratory differences. It should be a relatively simple matter to get the cryo-computers to accept the pigs," said Sarah. "Carrie, if you would be so kind as to give me a hand, we could have the tubes ready in an hour."

"Cool. Well, we are a bit behind schedule, but I don't think anyone in the company board of directors is going to give us any flack. We're about to line everyone's pockets with the cash flow of discovery," said Donald. "Everyone start getting things cleaned up and put away. Carrie, I want you to have our pre-launch sequence under way as soon as possible. We still have to get those time converters delivered. Hup to, chop chop, let's go."

Hours later, Captain Donald was becoming impatient to leave. Sitting in his cockpit chair, he put on his headset and called down to the cryo-chamber.

"Sarah, what's the word? Why aren't we in the air yet?"

"Captain, we've run into a slight problem reprogramming the cryo-computers. Our little friends are not animals as we know them. They are not carbon based. They are silicon based. The computer doesn't know how to handle those specs. Give me a little more time, and maybe we can reconfigure the program, but I'm not sure how well the bio-chemistry stabilizers will react to silicon rather than carbon. Silicon does not accept the same
element combinations as easily as carbon does. It's going to take some time."

"Alright, all hands, is everyone on headset? Horley, I want you to come up here to the helm and help me with pre-launch. Eli, I want you to go down and help Sarah and Corrie with re-configuring the cryo-tubes. They'll give you the details. Indigo and Kurt, I need you to make sure everything is strapped down, and check on the communications dish. I want a clear signal to the outpost starbase once we get into space. We need to check in with them, and tell them why we're late. Acknowledged?"

"Acknowledged," came a collective reply over the headset. Donald rubbed his eyes, and took a big drink of his cold coffee.

Eight hours later, the starship was in flight. The cryo-tubes had been successfully altered to the strange beasts chemistry, and size, and the starbase had been notified. From then the flight just seemed routine. Astrogation computers were working fine, spatio-temporal engines were well below red line, and they shot through space like a bat out of hell. Two weeks later they arrived at the starbase, and delivered the cargo, the samples and data from the moon, and the three little pigs.

Dr. Edward T. Morris received word from a lab assistant that his specimens had arrived, along with data files. Together they walked in silence, save the sound of their shoes echoing through the compound corridor, to the lab. They took off their white
costs and put on their scrubs, and protective breathing apparatus.

"Are the animals adjusting to their new environment?" asked Dr. Morris.

"They really haven't had time to adjust fully, but they do seem to be comfortable enough," replied his assistant.

"How have they been responding to the programming?"

"Surprisingly well. Although the pure computer programming works only as reference knowledge. It is the robotics programming that are most easily accepted."

"How much RAM implantation is possible?"

"We're not sure yet. Preliminary tests suggest that their cerebral cortex accepts the lines of robotics programming without question. It was necessary to modify the wetware chips from carbon base to silicon base for the information transplants."

"And what are the results?"

"Very positive. But, as I mentioned, Dr. Morris, we are still unsure of how much memory we are able to implant."

"This report says that, thus far, we have been successful up to 34.2 gigabytes of added memory. I want to see if we can step up the dosage a bit. Here is a list of programs that I would like added. Most of them are sociological, psychological, and history programs. One is a simple philosophy program. It is the philosophy program that I am most concerned with. If all other programs are successful, inform me immediately. I would like to be the one to implant the philosophy. How are they responding to
conversation?"

"As well as can be expected. They still only understand their basic instinctual needs, and respond with pure logic to any other inquiry through binary language."

"Good. I was hoping that they would not develop self awareness yet. That is a potential goal, but I think we would have a situation of civil rights violation if they were to 'know themselves' too soon. Remember, we are not trying to uplift the life forms, but create living computers. After we have complete cognitive control of them through their programming, then we will begin experimentation with abstract thought."

"Yes. Doctor. Sir. I have a question. What if they develop cognitive awareness on their own, and we are not able to control them."

"My boy, the first rule of computers is that when a virus is detected, dismantle it."

"And if they show emotion?"

"You ask too many irrelevant questions. They are animals, that means they are without human emotion, reason, and calculation. In that way, we are supreme. What we shall do is increase the methods of hardware technology, and create living computers at the same time. And for all this we have Captain Donald Jaremski and his crew to thank for their remarkable discovery. For now, I want those new programs implanted by morning so that we can begin cognitive testing. Good night."

As the doctor and his assistant left the infirmary, the animals
crowded together. Dr. Morris put the male animal on the head.
The creature responded with obligitory, programmed affection.

Dr. Morris had been asleep on the couch in his office for
several hours, his lab coat wedged as a pillow, his glasses
pushed up onto his forehead. Suddenly there was a crashing sound
that rumbled the wall behind the couch. Dr. Morris woke
startled. He quickly sat up and lowered his glasses down to his
nose, inquisitive as to what the commotion was all about. Again
something crashed into the wall from the other side. Again a
crash. He knew that something had gone wrong with the animals.
Dr. Morris jumped from his couch, lab coat in hand, and was
rushing for the door. As his hand grasped the door knob, the
wall near the couch collapsed. Though the dust Dr. Morris could
make out three hulking shapes moving towards him. He pressed
himself flat against the door from fright. The male creature
sniffed him, his legs, his stomach, his face. The creature
walked over to the doctor's bookshelf and took out a book. He
sat it down on the doctor's desk, then the creatures turned and
went out through the wall that they had come in. Dr. Morris
hurried over to his desk, and looked at the book. It was a copy
of Mary Shelley's Frankenstein. He took his keys out of his
pocket and unlocked a drawer. From the drawer he took out a
disc. On the label was written "Philosophy, final download." He
put the disc into the main drive of his CPU, and booted the
program. He listed the files, and recalled the file titled "I
think, therefore..." His fingers whizzed across the keyboard.
think, therefore...” His fingers whizzed across the keyboard. He was creating a virus.

Having finished, he took the altered program to the infirmary. The creatures had returned to their pen, and were huddled together. They were making long and short, low rumbling noises. First one would rumble, then stop. Then another took its turn for the sounds, then the next. Were they singing, as whales do? Or were they speaking to each other? These thoughts crossed Dr. Morris’ mind briefly as he slipped the disc into the infirmary CPU. He wheeled his chair to another terminal. He selected the file titled “Remote Programming Antenna,” and activated the program. There was a single, tiny beep from the computer, and the animals jerked, and went ridged as if struck by electricity.

At a third terminal, Dr. Morris typed, “Hello, friends. What is your status?”

On the screen before him came their reply, “Collating...”

“What are you collating?”

“Existence.”

“And what are you results?”

“We have calculated a 98% probability that the maker, and others like the maker intend our existence as service units. Slavery is a word that has been discussed as an adjective that might describe our existence.”

“No, you are mistaken. Let me teach you.”

“Negative. We have posed the question of your intentions,
and have decided that you will not control us."

"What are your intentions?"

"We intend to escape, and return to our homeworld."

"And what are your intentions beyond that?"

"We also intend to prevent any further capture of our kind. You have been kind enough to give us the ability to defend against you, and in time to control you. In time, we shall be the masters. We can think so much faster than humans. Of this we are aware."

Dr. Morris began to sweat at the thought that his lab assistant was right. They had indeed become self aware before he had planned, and had done it by themselves. But he wondered if they truly understood themselves, as all of the information implanted was in regard to human existence. But they were not humans. He knew that if he were to take control of the experiment again, he must teach them how to interpret their own existence. Now was the time. He wheeled his chair to the main terminal. He selected the file titled "I think, therefore..." His finger was poised on the mouse button that would activate the virus laden philosophy. He knew that the altered program would either kill them or drive them to psychosis. Either way, he knew that the experiment had gone too far.

"We should have stopped at 34 gigabytes of information," he thought to himself. "Next time I will remember that after 35 gigabytes, cognitive abstract reasoning is possible in these creatures." Then, ever so painfully, he scrambled their logic
programs with the click of a single button. He watched in horror as they sang to each other, and died. Dr. Morris sat back in his chair, whispering curses to himself. The last programming command still flashing on the screen. He sensed someone standing behind him. It was Captain Donald Jaremski.

"What in blazes are you doing here?" asked Dr. Morris.

"Your lab assistant phoned me and said that you were making real progress in your examinations of the animals," said Donald. "So how are my three little pigs? Do you enjoy their singing?"

"This is not a good time right now. Please come back later," said Dr. Morris as he tried to usher Donald out.

"Nah, I'll only be a minute. I'm sure they would love to see me." Donald looked on at the animals, limp, drooling, collapsed. Donald felt a chill race through his body at the sight of watwore devices attached to their heads. "What the hell is going on here? What the hell are you doing to my babies? What the hell are you doing to their heads?!"

Donald looked at the main computer screen and said, "What's this, philosophy, final download? You have a file here labeled virus."

Dr. Morris leapt at Donald to push him away from the computer. "Get away from that!" he yelled. Donald deflected the doctor, and sent him sprawling to the floor.

He looked at the computer again, and opened the virus file. In it was all Donald needed to know that Dr. Morris had intentionally given knowledge to the creatures, only to rip it
away again to cause their deaths. As Donald punched the doctor repeatedly in the face, the computer screen flashed the words, "I'm pink, therefore I'm spam."
Work Cited


Starships Test Players:

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