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LETTER FROM THE EDITOR

Hello Explorers!

And welcome to our "Summer of Sathar" issue of the Frontier Explorer. When we relaunched the magazine and put out a call for articles, we received a huge number of articles related to the sathar. So, we decided to do another issue primarily focused on the sathar. As the official villain of the setting, they receive a lot of attention. In fact, this is the third sathar-themed article between the Star Frontiersman and Frontier Explorer magazines, making the sathar and starships the topics tied for the most number of themed issues. Also, it fit in nicely with our "in world" story of the break in publication being caused by a sathar incursion into the Frontier - since they recently attacked, there would be a lot of material being generated talking about

When we sat down to put the issue together, we realized we had so much material that it might not even fit in to a single issue. Every article in this issue, except for the book review which was bumped from last issue due to page count considerations, and our regular Titian Rising comic and Jurak Hangna article, are related to the sathar in one way or another. And we had at least one more article that wasn't quite finished in time that will appear in a future

As part of our summer of sathar we have articles about sathar tactics, stats on a large number of sathar robots and vehicles, as well as stats elucidating the difference between the sathar in the various castes, a fan-created concept that seems to be very popular among our authors. There is a discussion of sathar biology, a new sathar terror weapon, and a look at our old friend the quickdeath with some variations on the original creature.

I also want to give a big shout out to Brian Phongluangtham, who did our cover image for this issue. The idea was tossed out

on our Discord channel when we realized we had basically an all-sathar issue. He posted a sketch two days later as the concept. I provided a bit of art direction for use as the cover and a week later he posted the final version. He also did a few of the pictures we used throughout the issue. And finally, he created the small "standee" miniatures that appear on the last page of the issue. These are designed to be printed on a heavy stock paper, cut out, and then can be used as miniatures for tabletop play.

This issue is coming out a little later than usual and later than I had hoped but that is mostly my fault. I'm still getting used to not doing everything myself and didn't pull the trigger on getting this issue going soon enough to account for the extra communication time needed to coordinate everyone's efforts, and I dropped the ball on following up several times as well. But we got the issue completed and out the door without too much delay. I'm going to try to get this more organized for the next is-

This issue also represents a major milestone for the Frontier Explorer. There are not 25 issues of both the Frontier Explorer and the Star Frontiersman available at their respective websites and on DriveThruRPG, plus the two technical manuals published in the Frontier Explorer Presents series. That's 52 fanzine issues over the past 12 years. And the Frontier Explorer is still going strong. We've got all the articles lined up for the next issue and many for issues into the future beyond that. There were three articles slated for this issue, including a new series, that were bumped to make room for the sathar articles. So you can look forward to many more issues of the Frontier Explorer in the future.

There are a lot of resources in this issue and I hope you find them useful in your game. Sit back and dive into the world of the sathar. And as always, keep exploring!

—Tom Stephens Senior Editor

BOOK REVIEW: POLARIS RISING

BY THOMAS VERREAULT

Polaris Rising by Jessie Mihalik is her debut novel and the first in a series. It is also a novel that crosses genres: a sci-fi action adventure that is also a romance novel. I haven't read a romance novel since I was a nerdy bookworm of a teen and was curious about what my mother saw in that genre of literature. I simply bought the book because it was on the new releases book shelf in the fantasy/sci-fi section of the book store.

The story sets the stage for galactic warfare in a "Traveler" like empire of man setting. The main characters manage to escape imprisonment and come up with possession of an elite experimental craft. The action is almost like a Saturday morning serial adventure reminiscent of Jason of Star Command and there is a big slow down in the action or letting off of pressure toward the end right before the action picks up for a very quick finish. I was irritated with the story for that but I also understood that Ms Mahalik was trying to set up a series. This slow down was about laying the ground work for that. Oddly the promised second book will not be about the main characters in this story but about supporting characters introduced right at the end of the book. I suppose that is a feature of the stories being romances; if the main characters have worked out their relationship and communication issues vou need to move on to new main characters for the next novel.

As noted, the setting is on a galactic scale and had two interesting planetary locations. One was an outpost mining colony where most of the mining has moved on and the new major industry is smuggling. This location would be ideal to drop into almost any game. The location was an independent trade center named Sedition where anything could be bought. It reminded me of the planet Faire and the Minzii marketplace in the Star Frontiers setting.

Adventure wise the plot works for an RPG up until they go to Earth when all the action is largely talking. However, escaping imprisonment aboard the ship of bounty hunters, hiding out on a min-



ing colony while avoiding capture from a third party looking to quietly capture you and stealing his ship, visiting a galactic market to stock up on weapons before penetrating a secret mining and research facility isn't a bad plot for an RPG adven-

Normally I would devote one paragraph each to evaluate the story, the setting and the book's value as an RPG adventure but I'll need to address the fact that this story is a romance. I suspect that its fairly formulaic as romances go. The tension builds for the main characters until they get into bed in chapter 16. Then there is some miscommunication and the tension builds again until they resolve it and have sex again at the end. As stated before, romance isn't my cup of tea but I figured I would roll with it and welcomed the chance to read something that crosses genres since its not all that often that you come across something truly innovative

in literature. I found the romance side of the story kind of predictable although it didn't bother me all that much. The sex scenes were steamy and the dialog reflects a new generation of romance readers using the "F" word in place of other words that a romance novelist might have used for love or sex. Not sure if Jessie Mihalik is the first to blaze this trail of crossed genres but I am certain there is a niche market for her among female devotees to sci-fi and maybe some of us closeted nerdy male bookworms. I suppose time will tell if the sci-fi/action adventure/romance catches on. For myself the story was metzah-metzah as far as stories go, the romance was something I personally could leave behind but there was a lot to the scifi that I liked and saw as worthwhile for stealing for use in my local role-playing game sessions. I would congratulate Ms Mahalik for producing something I found unique and interesting.

Blood red sun rays still reflected off the cirrus clouds even though Prenglar had set nearly half an hour before.

"Karel, the envoy is here," said Yal'groba the Dralasite, who had just opened the door.

"I'll be right there, Yal," Karel Curda said. Staring out over the Bay of Loren, he saw the brilliant lights of the city of Port Loren off in the distance. He wished he had more time to just drink in all the sights, but there was no more time.

Taking one last look about and glancing at his computer pad, he noted the security robots were in the places he had positioned them. There was always that nagging doubt whether or not he had anticipated everything. Again, there was no more time to recheck. What would happen would happen.

Turning to the nearby service robot, he ordered, "Begin the preparations." The robot moved off to handle its assigned tasks.

Leaving the vast balcony that wrapped around the upper floor of the mansion, Curda entered the great room where their host, Vir'Skul, dean of the University of Port Loren's College of Diplomatic Studies, had gathered the small group together. Right now, they milled about their guest who was a special dignitary from a far-off system.

Others in the group included the two Yazirian twins, Harrae (the sister) and Jallee

(the brother), who were both intelligence analysts and considered experts on the Sathar. He had known them all for many years. He considered them all his friends.

The four Star Law Rangers who had escorted the envoy from the star port hotel went outside to supplement the local police who provided additional security.

"And over here," Vir'Skul saying while his antenna waved in the air excitedly as he turned. "Here is Karel Curda of the Pan-Galactic Corporation. He helped make tonight's event possible."

The guest slithered forward. It wore the equivalent of a "sock" over his lower tail section, so as not to leave a slime trail, which many of the Core Four found distasteful. Its lower tentacles were folded close to its body; unlike how they were shown in some of the entertainment videos, Curda knew the lower tentacles were not normally used as legs, but they could be used for balancing.

"And, Karel, this is Zarhomma, First Peer of the S'sostra Birthright," Vir'Skul continued with the formal introductions.

Curda met the gaze of the dignitary, peering into the yellow eyes with it two black pupils, trying to fathom what the creature was thinking. He often wondered, whenever he stared into such eyes, what they thought.

"A pleas-shure to meet you," Zarhomma

said with a lisp as it extended a bright pink upper tentacle.

Grasping the gloved "hand" of the tentacle, Curda said, "You've obviously learned the Human custom of shaking hands."

"It is part of the journey of discovery," Zarhomma said. "We want to understand the Frontier more so our people can prevent any further misunderstandings."

"Yes," interjected Jallee, one of the two Yazirian twins present, as he barred his teeth, "you don't want someone mistaking you for a Sathar."

The worm's head twisted slightly, back and forth, which Curda suspected was an expression of disquiet. "The fact that we S'sessu bear a resemblance to your dreaded enemy causes us a quite a measure of distress."

"But it's more than a resemblance," interjected Harrae, Jallee's twin. The female Yazirian was physically taller and bigger than her brother. "Aren't the S'sessu and Sathar 99 percent genetically related?"

Again, Zarhomma's head twisted slightly, but it said, "According to the samples the UPF sent us, the S'sessu and Sathar are 99.8 percent related. We admit that DNA does not lie."

"Friends, friends," said Yal. "This is supposed to be a social get-together. Save the fireworks for the Sathar Summit..."

MORE ON SATHAROID BIOLOGY

AND THE RAMIFICATIONS OF IT

BY LAURA MUMMA AND JOSEPH CABADAS

Note: This article is a continuation of a look at Satharoids that was published in Frontier Explorer, issue 16, Spring 2016. The accompanying fiction story, "Curda's Exit," was written by Joseph Cabadas.

HISTORICAL BACKGROUND

The Frontier's first known contact with the Sathar came when "they attacked and destroyed lonely systems on the edges of explored space, moving slowly inward," according to the Basic Game rulebook.

Survivors described Sathar as wormlike creatures 3 to 4 meters long. That was all that was known about them because they would rather kill themselves than be captured.

After the first Sathar invasion, initially called the "Great Sathar War," the four colonial races of the Frontier put aside their

differences to form a defense organization, known as the United Planetary Federation. The Core Four included the Humans; the rubbery, blob-like Dralasites; the winged, simian-like Yazirians, and the bug-like Vrusk

As conflicts with the Sathar turned into a shadowy war of espionage, sabotage, and terrorist attacks—interspaced with military clashes—the UPF used its Frontier-wide police force, Star Law, to hunt down Sathar agents. The Frontier began holding the bi-annual Sathar Summit to pool everyone's knowledge about their common foe.

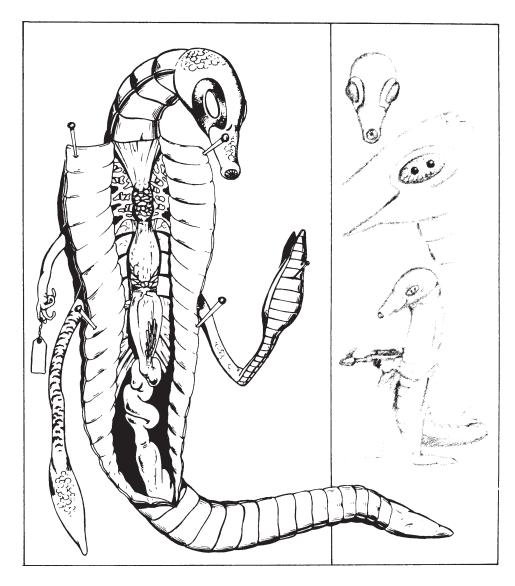
Years after the First Sathar War, a Spacefleet frigate known as the UPFS Hellscar misjumped into the S'sessu's home system. The location, according to Star Frontiers creator David "Zeb" Cook is "ten light years from the Gruna Garu system... on a line running from Dixon's Star to Gruna Garu and on to the S'sessu worlds."

The Hellscar had been severely damaged in a fight with two Sathar ships before it misjumped. When the frigate's crew made contact with the S'sessu scout ship, the Spacefleet captain thought he had found a Sathar star system.

Sending a distress signal back to home, the damaged Hellscar engaged the S'sessu ship in battle. Though at a technological disadvantage, the S'sessu disabled the Frontier vessel and captured it.

Weeks later, a Spacefleet rescue force arrived at the S'sessu system. The S'sessu were impressed by the size of the Frontier's fleet—especially its capital ships.

Further bloodshed was avoided by both sides through diplomatic talks. The S'sessu, though, kept the Hellscar as a prize won in battle.



The Frontier began trading with the two S'sessu star systems and other minor races in the region called the "Edge of the Vast Expanse," which lies to the south of the Frontier map.

BASICS OF SATHAROID BIOLOGY

Before the Frontier had contact with the S'sessu, UPF xenobiologists only had dead Sathar bodies to study.

Many of these specimens were the soldiers killed on the ground during the invasions and occupations of Pale and New Pale in the Truane's Star system and during the siege of the refugees on Laco at Dixon's Star. Other Sathar bodies were recovered from various wrecked ships. Few of the bodies were well preserved.

While it was thought that the Sathar were endothermic, Frontier scientists now know that they are actually ectotherms (cold-blooded).

Their bodies release hormonal steroids to either increase or decrease their metabolisms. This keeps a Satharoid's body temperature at an average of 28 degrees Celsius, allowing them to withstand extremes of heat or cold as well as any of the Core Four races.

Sathar and S'sessu (Satharoids) are almost identical in appearance. An adult satharoid weighs around 55 kilograms and is about 3.5-meters long. Worm-like creatures, they move by slithering across the

They have heads that taper to their circular mouths, which are ringed with teeth. Each eye has two pupils.

Satharoids have four tentacles. The upper pair is slender and used for delicate work, while the lower tentacles are used for heavy lifting.

The best way to distinguish between a Sathar and a S'sessu from a distance is their coloration. The Sathar's skin ranges from yellows or browns, possibly indicating that they prefer danker, more somber surroundings.

GREAT GIFT

"...So, you still claim that that the S'sessu and Sathar were separated 10,000 years ago?" asked Curda

"You sound doubtful," Zarhomma said.

"Well, gentlebeing, we still have much to learn about the S'sessu," interjected Vir'Skul as he accepted some tea from one of the ever-present service robots that Curda had brought to the mansion. Vir'Skul's normal attendants and family had been sent away for the night.

"And, you resemble the Sathar to a far greater degree than a race that has been separated by a hundred centuries," added Yal'groba. The Dralasite was inhaling the steam off of his "drink."

The S'sessu brought its upper tentacles together, in a manner that reminded Curda of a Human when going to pray. In this case, it was a gesture of understanding, like nodding one's head.

"A major reason for my mission here is to help alleviate doubts," Zarhomma said. "Some of our legends say that our race was brought to our home planet by the messengers of the Great Worm. We believe those messengers are the ancient spacefaring nation that you have called the Tetrarchs.

"Since, according to the archeological information the UPF provided us, the Tetrarchs left this region of space some 10,000 years ago. That is when we think the split between the S'sessu and Sathar occurred," Zarhomma continued. "In my native tongue, our home planet's name, Phri'sk, means 'place of wonder' or 'the great gift,' because the messengers gave it to us. That reminds me, what do Humans call their home planet?"

"Dirt," replied Curda, which brought some snickers from the Yazirian twins who sat across the fire pit. He had had many a round-and-round discussion with the both of them in the past about what had happened to the lost home worlds of the Core Four races.

"Dirt? That's an interesting name. Can you tell me more?" Zarhomma asked.

"Dirt is one of the PanGal translations of the home world's name," Curda explained. "It could also be called soil, dust, or terra. Terra was some old female goddess of mythology, but I think we get the words terrestrial and terrain from it. Others just call the home world earth, which is another word for soil or dirt"

Zarhomma cocked its head, which was a gesture of interest. "With names like that, it must be a beautiful place like Phri'sk."

"If you say so. It was supposed to be located near the center of the galaxy, but I think that is poetic language to mean it was at the center of Human civilization. The matter is mute. Any contact with the home world has been long lost for unknown reasons," Curda said.

"That's a shame," Zarhomma observed...

Sathar also have distinctive patterns of dots and stripes on their heads. These head markings indicate an individual's clan, caste, ranking, and vocation.

In general, the average S'sessu is physically stronger, have a greater dexterity, and is smarter than many Sathar. Calling the planet Phri'sk as their home, the S'sessu have apparently adapted to its brighter flora and fauna. Their skins typically are pinks and greens.

Although the S'sessu do not use head markings, they have other adornments including tentacle bands, mouth bracers, and body bands that a Humans might call necklaces and belts. Otherwise, practically all other physical descriptive information about the S'sessu are the same as the Sathar.

PARASITIC HERITAGE?

In examining the Sathar's bodies, Frontier xenobiologists noted their circular mouths that are ringed with hard cartilage-like teeth. They theorized that the proto-Sathar that evolved into Sathar and S'sessu were either a parasitic or scavenger creature.

These proto-Sathar probably latched onto another living creature burrowing into it with its teeth to reach blood and body fluids. It is conjectured that they could also survive by filter feeding, sucking in smaller live animals and other nutrients, eating algae off of rocks, and very possibly being a scavenger of partly decayed plant and animal matter.

Such conjectures, however, are very insulting to the S'sessu even though they've been observed to eat a semi-liquefied diet of both fresh and decayed plants and animals. Sathar cuisine is probably very slimy and likely nauseating to many of the Core Four races.

Both Sathar and S'sessu have a gizzard with stones in it to help with digestion and both races seem to share a penchant for wanting fancy gizzard stones. Some S'sessu have been known to use semi-precious to precious gemstones.

While lower caste Sathar are only known to use ordinary stones, middle caste and high caste members use fancy to expensive stones.

Because their digestive system is designed to break down and remove calcium from the worm's blood stream, the worms tend to be calcium sensitive with some having severe allergic reactions to calcium build-up in their bodies.

Many traditional S'sessu poisons and

weapons were made of animal bone and teeth in the hopes of inflicting a slow death on an enemy. Modern weapons, such as fragmentation grenades or scattergun pellets or needlers might be coated with calcium to inflict calcium disease.

Please see "Things Wormy: Looking at S'sessu Biology, Items, Flora and Fauna" in issue 16 of Frontier Explorer for more information about calcium disease and gizzard stones.

SEGMENTED BODY AND MOVEMENT

Despite lacking a skeletal system, Satharoids have incredibly muscular bodies. They are born with 38 segments, including the head, which is the first segment. The upper and lower tentacles are located at segments nine and twelve, respectively.

The upper tentacles are one-meter long and end in four finger-like appendages, which make up the "hand." This has led to a numbering system based on multiples of fours and eights.

Ending in paddles, the 1.2-meter-long lower tentacles are often used for heavy lifting, climbing, and encircling objects. Although they are sometimes depicted as standing on their lower tentacles, they do not walk on them. They can use their lower tentacles to raise their upper body and head—so it is more even with Humans and Yazirians—or to balance themselves when firing a weapon.

Using the action of their segments and muscles, Satharoids slither their bodies across the ground, often in a serpentine motion. They have also been known to use sidewinding or concertina or caterpillar motions. The underside of their bodies is specialized for this purpose like the tread on a tire.

They can climb trees using their ability to constrict while keeping all four tentacles available for other activities. For example, a Satharoid could coil on a tree branch, hiding from characters below, while using the front tentacles to grab or use a weapon.

At home on the water, Satharoids can easily slide on the surface, using their limbs to add extra speed. They also swim very effectively underwater.

Defensively, Satharoids can coil their bodies to see more clearly by gaining height and can quickly retract their rear segments or front segments. For example, a S'sessu can jump quickly; reaching a target at a distance equal to its length, but it does not need to coil to strike.

They can do head-butts and tail-punches

but can also constrict another creature, suffocating it to death by preventing it from taking in air.

USE OF DUAL BRAINS

Thanks to studies by Frontier xenobiologists and insights from contact with the S'sessu, it is known that the Satharoid nervous system has three parts—the Central Nervous System (CNS), Peripheral Nervous System (PNS) and the Sympathetic Nervous System (SNS).

The central nervous system consists of bilateral symmetric pear-shaped brains—in other words, Satharoids have two brains. Peripheral nervous system nerves originate from each brain and supply the head (segment 1), buccal chamber (mouth) and pharynx, while the sympathetic nervous system consists of nerve plexuses in the epidermis and alimentary canal or digestive track. A plexus is a web of nerve cells connected together in a two-dimensional grid.

Satharoids have two nerve cords that run along their ventral side instead of the dorsal side like most sentient Frontier being. So, instead of a spinal column, they have dual "belly cords."

If one cord is severed, they may be temporarily paralyzed on one side, but with training one belly cord can handle all their bodily functions. Also because of the dual brain, Satharoids are ambidextrous.

CIRCULATORY SYSTEM

Consisting of three main parts, the Satharoids' circulatory system includes the aortic arches, dorsal blood vessels, and ventral blood vessels. The five aortic arches function like a human heart and pump blood into the dorsal and ventral blood vessels.

The dorsal blood vessels are responsible for carrying blood to the front of the body. The ventral blood vessels are responsible for carrying blood to the back of the body.

RESPIRATION AND SLIME

Satharoids do not have lungs—though the S'sessu would argue otherwise—but rather breathe through their skin. They also have a supplemental air sac, where they breathe in air, which in turn allows them to make sounds and essentially talk.

The air sac is far less complex than lungs found on Humans, Yazirians, or Vrusk. A Sathar breathes through a process called gular pumping, where they expand and contract their throat to pump the air in and out. The air flow through the sac is through a one-way loop, similar to that used by avians and a number of lizards.

Humans and many other animals have a "tidal" breathing pattern where air flows into their lungs, entering smaller airways and bronchia until ending at the alveoli, where oxygen enters the blood while carbon dioxide leaves the blood and enters the lungs to be exhaled.

In a one-way airflow system, the air is channeled through the lung-or the air sac in the case of Satharoids—and makes a loop before being exhaled. One-way airflow allows birds to fly at high altitudes without passing out and apparently helps Satharoids survive in low oxygen environments.

For a Satharoid to breathe through its skin, its slime must keep its bodies moist. Dorsal pores and nephropores exude a fluid that moistens and protects the Satharoid's surface.

If a Satharoid's skin dries out, it will become more susceptible to disease and infection. Depending upon the degree of drying out, it could die of suffocation.

Satharoid clothing must allow the worms to breathe, keeping the skin moist and allowing for air circulation.

LANGUAGE AND MUSIC

S'sessu (and probably Sathar) can easily follow two or more conversations at once and they have complicated languages with tonal differences creating a different meaning for each sound, which has led to confusion when their languages are translated by a standard polyvox.

Contributing to the problem of mistranslations is that S'sessu will only knowingly converse in one of their own languages when they believe they are the only ones around. Otherwise, they will resort to using Pan-Galactic. When asked about this tendency, the worms often reply that S'sessu is for S'sessu only.

When it comes to music, S'sessu songs and compositions often sound like clashing, discordant bedlam. Their operas are often made fun of by Core Four comedians as "worm commotion."

Another joke is that S'sessu music sounds like war, but war is quieter. But to a Satharoid, the clashing noises are filled with distinct melodies and discrete levels of meaning. Instead, they view most Frontier music and literature to be very simplistic in nature.

SENSES

The Satharoid ear is covered by a membrane that protects its complicated auditory system. Its hearing is equal to a Human's.

Special pits located near their eyes can detect small changes in temperature as well, allowing them to smell scents. However, their olfactory sense is less developed than a Human's. It should be noted that what smells good to a Satharoid may not smell good to other races.

However, the Satharoid's snake-like tongue functions as does a snake's and they possess a more sensitive sense of taste than an average Human's.

...Vir'Skul held the vase lovingly as he showed it to Zarhomma. "Do you see how the crystalline structure absolutely shimmers and how it changes under different angles of light?" the Vrusk asked.

"Absolutely! I have not seen anything like it before," Zarhomma said, putting his face closer to the vase. "Where is this made?"

"It comes from the planet Kraatar in the Tristkar system. The planet's sands are truly unique. The crafters there turn out many such beautiful artworks from small glasses to huge statues." The Vrusk carefully set the vase back down on the stand near where Curda sat...

A Satharoid's double pupils give it superior all-round vision, allowing it to see in several directions at once; they receive a +2 Initiative Modifier because of its excellent vision. The double pupils are capable of all dilating independently from small pinpoints to long wide slits as needed to focus on an object in bright or dim light.



"...The problem with your contracts, particularly with the Vrusk, is the weak use of clauses," Zarhomma

Vir'Skul issued an irritated series of clicks with his mandibles. "Are you trying to be insulting now?"

"Not at all. I'm just trying to point out that the Vrusk trade houses think they have complex contracts..."

"They are structured to anticipate every contingency."

"But your languages, especially when translated into Pan-Gal, are so simplistic. They lack any depth of meaning."

Curda leaned back in his chair. "Can you explain that more?"

Zarhomma flashed the equivalent of a S'sessu smile. "Why of course. If I said there is a S'sessu ship with the name of Plum, what does that mean to vou?"

"Plum is a fruit." Curda shrugged.

"Ah, but what kind of fruit? Is it sweet or sour? Or could it be something poisonous to a Sathar or S'sessu?"

From across the table, Yal the Dralasite said, "You seem to be able to eat Human-like food. Are plums poisonous to you?"

"Not Human plums, but there are fruits on my planet that would be poisonous. But I will expand further," Zarhomma said. "Is not plum also a

"It's a shade of purple," Curda said, noddina.

"But what if that color mean equates to blood and war? Or it could mean peace, good luck, or wealth?" Zarhomma said. "What if plum is a reference to sexual organs? Or does plum mean all of that to a Sathar or a S'sessu all at once? It depends upon how it is used."

"Or, there are words that sound similar but have different meanings," Curda added. "Humans have an expression such as when something is 'out of plumb,' it means that it is not precisely vertical. Which in a lot of cases, means it is not right."

Zarhomma pointed at him. "Now you are reaching an understanding..."

"...From the information you've provided, I would even stipulate that there are at least two different Sathar races, if we want to continue arguing about their similarities to S'sessu," Zarhomma countered.

"How do you come up with that conclusion, gentlebeing?" Yal the Dralasite inquired. The group had moved on to the mansion's dining room. Service robots skittered about, bringing in new courses of food—each specifically designed for the pallet of the guests.

One brought Curda a steaming plate of Gran Quivera great white cod, which was one of his favorites. The twins—Harrae and Jallee—received dishes of naktor, a traditional Yazirian cuisine that tasted like beef. Their host, Dean Vir'Skul, had steamed leaves with giant snail steaks and toasted tubeworms.

If the S'sessu had any objection to the Vrusk eating worms, it didn't show it, Curda thought. Of course, Zarhomma was eating a food comprising of various cooked insects. It made him wonder of the infamous animosity between the Vrusk and the S'sessu had anything to do with their food choices—and whether the food choices at this meal were a political statement between the two.

"From the data that the UPF sent us, it looks like there are these Lower Caste Sathar and everybody else," Zarhomma explained. "I would say that the Lower Caste live a nightmarish life, controlled by drugs or some form of brainwashing.

"The Middle Caste members are divided between technicians and warriors. They are far are better off than the Lower Caste but owe fidelity to the Upper Caste. Only the Upper Caste have any true freedom with better food, access to technology, and maybe even choices," the S'sessu said.

Frowning, Jallee, who like the others was considered an expert on the Sathar, leaned forward. "That's an awful lot of conjecture based upon what we know. No captive has ever been able to tell us the true motivations of the Sathar or how their society is organized."

Folding its upper tentacles, Zarhomma said, "I admit I am using guesses, but it is based off of my own experiences. We S'sessu look for advantages. We align ourselves with whoever allows us to advance."

"It sounds very disorderly," Vir'Skul said.

"It works for us," Zarhomma replied. "I can see the Sathar operating along similar lines, but only at the top levels. The way the Lower Caste members seem to be controlled, there is not a way for them to advance or voluntarily align themselves with anyone.

"But, back to how long a Sathar can live. It seems that my cousins have found ways to preserve the brains of their more desirable members—or as a punishment for enemies—to become the basis for cybots and intelligent computers," Zarhomma said. "That is just ghoulish..."

Their eyes come in a range of very striking vibrant colors and they can process large amounts visual information, which is amazing compared to the Core Four races because of their dual brains.

EYESIGHT AND WEAPONS' DESIGN

No Sathar weapons feature gun sights of any kind. The reasons for this are not immediately clear from the outset, but by considering information gleaned from both forensic and combat reports several theories have been developed.

Sathar tend to fire their weapons "from the hip" (to use a Human phrase). Opportunity and general fire with rifles seem to involve a similar looseness.

Despite this, no one would claim that Sathar are generally poor marksmen. One theory as to why this is so is derived from studies of S'sessu's eyes and brains. Their depth and range perception may be acute in a way that aiming is carried out in a different manner than the Core Four races.

Studies have shown that the Sathar visual cortex seems much more developed than those of the Frontier races including the S'sessu, and that neural pathways from the eyes are much more complex. This in turn suggests that Sathar eyesight and brain visual processes may involve a very highly developed level of hand-eye co-ordination, although the reasons why the Sathar have evolved in such a way is not yet clear.

MORE THAN ONE TYPE OF SATHAR?

S'sessu have an average lifespan of 100 years, but it is difficult to determine if the Sathar have longer or shorter lives. Much may depend upon whether the Sathar in question is a member of the

Upper Caste, the Middle Caste, or the Lower Caste.

In all likelihood, old age does not happen among Lower Caste Sathar. When they begin declining, losing about 20 of their efficiency due to old age, they are killed by their clan. Only Middle Caste and Upper Caste Sathar have the privilege of a longer life and probably only the Upper Caste members may reach the age of natural death.

The Lower Caste makes up the vast majority of any Sathar clan's population. Middle Caste members may range between 10-20 percent, while the Upper Caste is only 1-4 percent of the population.

None of the Lower Caste and only a few Middle Caste members possess the Sathar's hypnotic ability. This innate Mentalist ability is much more common among Upper Caste members.

The differences between the S'sessu and the various Sathar caste members can be seen in the "Differences Between Satharoids" chart, which provides the ability modifiers along with their average statistics.

RACIAL SPECIAL ABILITIES/WEAKNESSES

All Satharoids: **Excellent Vision**. Because of their ability to see to the front and the sides at the same time, S'sessu receive a + 2 Initiative Modifier (IM) bonus.

All Satharoids; **Ambidexterity**. Due to their dual brain, S'sessu can use weapons with either upper tentacle without worrying about whether they are rightor left-handed.

All Satharoids: **Limited Regeneration**. Generally, they are able to heal at

DIFFERENCES BETWEEN SATHAROIDS						
	STR/STA	DEX/RS	INT/LOG	PER/LDR	PS	IM
S'sessu Modifiers	45/45 +0	45/45 +0	55/55 +10	35/35 -10	3	5
Lower Caste Modifiers	40/40 -5	40/40 -5	30/30 -15	25/25 -20	<u>2</u>	4
Mid-Caste Technician Modifiers	40/40 -5	45/45 +0	50/50 +5	30/50* -5	3	5
Mid-Caste Warrior Modifiers	55/55 +10	45/45 +10	35/35 -10	35/55* +0	4	5
Upper Caste Modifiers	45/45 +0	45/45 +0	45/45 +0	45/65* +10	3	5
Walk: 10 m/t Run: 20 m/t Hourly: 3 kph						

* All Middle Caste and Upper Caste Sathar must move 10 points from Personality to Leadership

double the normal rate, and have some limited ability to regenerate lost limbs or tail sections.

All Satharoids: Susceptibility to Calcium Poisoning. The worms tend to be calcium sensitive with some having severe allergic reactions to calcium build-up in their bodies.

S'sessu Only: Ability Insight. Because of the extremely competitive nature of S'sessu society, individuals have developed the ability to judge the individual strengths and weaknesses of an opponent.

All S'sessu start with a score of 5 percent in this ability. This is the percentage chance a character has of learning one ability score or skill level of a being he observes. The S'sessu must see his opponent actually doing something related to that ability score before he can make the judgment.

Ability insight may be increased by spending experience points, just like any other ability score may be raised. This ability may only be used once per game hour, simulating the intense concentration required to use it.

Sathar Only: Hypnotism. A Sathar can hypnotize a character by talking to him in a non-combat situation. The character must make a Logic check; if he fails, he is hypnotized.

A hypnotized character will think the Sathar is his friend, and will want to cooperate with it. He will see things the way the Sathar describes them, if his other senses do not contradict what the Sathar tells him.

For example, a character would not believe that a fire was a pool of water.

A Sathar can command a hypnotized person to do something at a specific time, and to forget that he has been hypnotized until that time. For example, a character could be commanded to turn off a security system at midnight.

RACIAL REACTIONS

During any adventure, the referee may need to determine how random non-player characters may react to satharoid NPCs. This is especially true if the motivations of these characters are not determined in advance.

Below, the classic Racial Reaction Modifiers table has been altered to include the S'sessu. The modifiers provided are based on those of David Cook, one

SATHAR BONE KNIFE

"This," Zarhomma held up what appeared to be a white, bladed weapon, "as your archeologists have surmised, is a bone knife. Our own archaeological digs on Phri'sk have uncovered ones similar to it that our ancestors used centuries ago. I'm just surprised that you found it on some of the Sathar."

They were now seated back down near the fire pit again. Curda took his seat near the tall Kraatarian crystal vase. Dean Vir'Skul sat next to him on a flat. banana-shaped chair.

"May I see it?" Curda asked. The S'sessu handed it to him. It was heavy, and sharp.

"Why is it surprising?" Jallee asked. "Yazirians have many ceremonial weapons that haven't changed much, like the zamira."

"Yes, what is the purpose of such a thing?" Vir'Skul asked.

"It is an assassination weapon; at least that's what we believe," Zarhomma said. "Such bone blades are sharp, but they have these serrated points that are meant to break off in a victim—in this case another Sathar—in the hopes it will cause calcium disease, which is a slow, painful death.

"The knife also has a reservoir, probably for a poison. It is interesting that the Sathar kept such a design for thousands of years," the S'sessu added.

"Perhaps if it's effective. Maybe they figured why change it," Curda said while testing how the handle felt in his hand. It was awkward for a Human to use.

Their quest suddenly stared off to one side. "Why does that service robot keep moving around to the other robots?"

"What do you mean?" Vir'Skul asked, perplexed. "It is a service robot, is it not? But not once have I seen it provide anything to anyone here."

Vir'Skul gestured to Curda. "All robots and support staff here tonight were graciously provided by the Pan Galactic Corporation, courtesy of Karel's Special Services Department."

Curda put on what he hoped was a disarming smile—at least to his friends that were gathered about if not Zarhomma. "That's a Model 487. It coordinates the functions of the other robots. It's sort of like a mini brain robot." Noticing that Yal looked like he was about to object, Curda continued, "But I had a question, Zarhomma, what can you tell me about S'sessu tissue regeneration. I assume a Sathar miaht be the same."

"Probably true," the S'sessu said before launching into an explanation.

The Sathar bone knife is custom-made (tentacle-crafted, if you will) and carried by Upper Caste Sathar and selected Middle Caste Sathar. Fashioned from the leg bone of an unknown large animal, it is an assassination weapon that is primarily for use against other Satharoids (Sathar, S'sessu, and Rook-

While it has a point for stabbing, its cutting side has a serrated edge that can be used in a sawing motion on flesh. This edge has dagger-like points that break off in the victim's body in the hopes of causing calcium disease in Satharoids.

Just to ensure the victim dies a painful death, many versions of the bone knife have a reservoir for liquid, which must be filled shortly before being used. The poison begins to leak out and breakdown shortly (4d10 minutes) after being put into the reservoir.

When the knife strikes a target and the points break off, the poison is released into the victim. This poison is only a S1/T5 to Core Four and most other species, but to a Satharoid it will act as a S3/ T30 toxin. Additionally, this toxin causes extreme pain in a Satharoid, halving all ability and skill rolls for 1-5 days unless treated.

Victims can make a Stamina check to avoid the effects of the poison. It cannot be treated with the Frontier's normal anti-toxin shot. Only a special serum will cure the victim of the poisoning.

This weapon is prone to shattering while in use. If it does, it becomes useless. Any automatic failure will cause it to break. Additionally, for each successful use, the attacker must roll a d10 to avoid having the knife break. On the first check, a roll of 1-9 means the knife is still useful, a result of 10 means it breaks. After that, for each successful use, subtract 2 from the breakage number.

For example, the second time a character makes a successful attack, the chance to avoid breakage is now 1-7; the third time the knife is used, the chance to avoid breakage is 1-5; and so on.

The cost for this weapon is based on how much it would be to obtain in the Frontier. The normal source of supply would come from dead Sathar.

SATHAR BONE KNIFE

Type: Melee weapon Melee Mod.: +5

Cost: 100-500 Credits

Weight: 0.5 kg Damage: 1d10+5

Special Damage: Poison—S1/T5 versus Core

Four, S3/T30 vs. Satharoids

Defense: Inertia (knife), STA check (poison)

"You make it sound like you had an idyllic childhood," Vir'Skul observed. "All the young in a Vrusk trade house are often raised together while the parents work. It promotes a strong, life lasting bond."

"A happy unity does not always happen," Zarhomma said. "We have many epics about pouchling rivalries. There are some, as they grow older, who compete endlessly to prove who the truly dominant one is. There are even tragedies about a parent who seeks to destroy their upstart children. One can only image how the Sathar may be similar or different from us..."

"...So I imagine that the average Sathar procreator might have 10 to 20 or even 50 offspring during one mating, as opposed to two for a S'sessu," Zarhomma continued. "But there also seems to be an element of cannibalism to it."

"Cannibalism? What do you mean?" Harrae demanded. The Yazirian female fidgeted with the glass containing her after-dinner drink.

"The samples that the Pan Galactic Corporation gave us show that the Sathar's incubator cocoon lack certain nutrients that a S'sessu pouchling receives during its initial growth stages," Zarhomma said. "These nutrients are key to developing higher level cognitive skills and critical thinking. In one case, it looks like one or more of the embryonic Sathar, once they matured enough, ate its less developed cocoon mates. This would be one way for them to get the proper 'brain food' they need."

"So, there's Sathar population control?" asked Harrae's brother, Jallee.

"But this does not appear to happen all the time... with the limited archaeological evidence that you have from the New Pale occupation," Zarhomma said.

"What do you mean it doesn't happen all the time?" Yal the Dralasite asked.

"I think the Sathar intervene to prevent the firstborn or firstborns from eating the others."

"And that would cause what?" Harrae

"I imagine that the young Sathar who do not receive enough critical nutrients would be brain damaged," Zarhomma said. "That may be how the Sathar create large numbers of Lower Caste members. In turn, most Sathar would not view the individuals of other species to have much worth except for those who appear to them to be the leaders."

of the originators of the Star Frontiers game and the one who introduced the S'sessu as an optional race in Dragon magazine.

The Vrusk tend to dislike the S'sessu because they have suffered in business dealings from the S'sessu's "love for dirty tricks."

The Sathar are usually treated as an enemy and will engage in combat when encountered. They are normally not open to talking to or negotiating with anyone.

LIMITED REGENERATION

Like worms found on other planets, the Satharoid have limited regeneration capabilities if it loses a portion of its locomotion tail or tentacles.

Generally, if it loses no more than six of its lower segments, a Satharoid can regrow its tail, taking on average about one month for each segment. There is a chance, however, that it will suffer a deformity. Such deformities may be cosmetic or it may impede movement.

If a Satharoid loses six to twelve of its tail segments, the chances of deformity rises, but so does the possibility that it will not be able to heal at all. A prosthetic tail may be needed to regain full mobility.

A Satharoid can only survive a loss of more than twelve of its tail segments with a prosthetic and other advanced

RACIAL REACTION MODIFIERS						
PLAYER CHARACTER RACES						
NPC RACES	HUMAN	DRALASITE	VRUSK	YAZIRIAN	SATHAR	S'SESSU
Human	0	0	-10	-5	-20	-5
Dralasite	0	+10	+5	0	-20	0
Vrusk	-5	0	0	0	-10	-10
Yazirian	-5	-10	0	0	-30	0
Sathar	-20	-30	-10	-20	0	0
S'sessu	0	0	-5	0	+5	0

TAIL REGENERATION CHART						
LOST TAIL SEGMENTS	EFFECTS	% DEFORMITY/ FAILED REGROWTH	EFFECTS OF DEFORMITY / FAILED REGENERATION			
1-3	Max. STA temporarily reduced by 3 points. Regrowth in 12-20 days.	5 % / 1 %	Cosmetic deformity / Permanent reduction in Max. STA			
4-5	Max. STA temporarily reduced by 5 points, movement reduced by 1 meter/turn. Regrowth in 30-40 days.	10 % / 3 %	Cosmetic deformity / Permanent reduction in Max. STA, permanent movement reduction without prosthetic			
6-7	Max. STA temporarily reduced by 8 points; walk/run movement reduced by half. Regrowth in 48-60 days.	20 % / 10 %	Deformity causes permanent movement reduction without prosthesis / Permanent reduction in Max. STA, permanent movement reduction without prosthetic			
8-10	Max. STA temporarily reduced by 15 points, Strength check/turn to move half rate otherwise 1 meter per turn. Regrowth in 72-100 days.	25 % / 15 %	Deformity causes permanent movement reduction without prosthetic / Permanent reduction in Max. STA, permanent movement reduction without prosthetic			
11-12	Max. STA temporarily reduced by 15 points; Strength check/ turn to move 1 meter per turn. Regrowth in 100-120 days.	35% / 20 %	Deformity causes permanent movement reduction without prosthesis / Permanent reduction in Max. STA, permanent movement reduction without prosthetic			
13 +		vanced medical t	eeded for life. It cannot naturally regenerate reatment to survive. Transplants and/or			

medical care. (See the Tail Regeneration Chart.)

The lower tentacles can regenerate if one is completely lost; the upper tentacles can regenerate if no more than twothirds are lost. Again, there is a 5 percent chance for deformity. Tentacles will regenerate within 12 days.

They can also heal from normal injuries at double the normal rate for most races—two Stamina points per day with normal bed rest-or 1-4 additional points when a medic successfully applies Medical Treatment: Wounds (I, II or III). This additional regenerative ability does not apply to healing from radiation, infection, disease or infestation.

REPRODUCTION DIFFERENCES

Satharoids are hermaphroditic, meaning that they have female and male sexual organs. The female pores are located near the upper tentacles at segment nine, while the male pores are near the lower tentacles at segment twelve.

When S'sessu procreate, both worms tend to become pregnant with one to two young. They carry their young in a pouch at segment ten (note, the Sathar do not have this structure) for eighteen weeks before birthing the young worms—called "pouchlings"—in a cocoon of slime and nutrients that the parent makes in the soil. In the cocoon, the two young worms mature for another ten weeks before it is time to emerge.

Even in the competitive and amoralistic nature of the S'sessu society, there tends to be a strong bond between the birth progenitor and its young and between the pouchlings who were brought up together.

Archeological evidence of Sathar-only encampments on Pale, New Pale, and Laco during the occupations of the First Sathar War uncovered a couple instances of how they reproduce.

Sometime after a Sathar has copulated and separated from its partner, it would secret mucus that forms a ring around its body. As it backs out of this ring, the Sathar injects its own eggs and the other Sathar's sperm into it.

Once the Sathar slips out of the ring, its ends seal to form a vaguely lemon-shaped incubator cocoon. Here the embryonic Sathar develop. They emerge as small but fully formed Sathar, but lack their sex structures, which develop latter.

SUICIDE MECHANISM

The Model 487 service robot had finished making its rounds through the house, including passing by the CR-357 combat robot on the mezzanine level. It now waited attentively near Curda's elbow as he sat.

Yal approached him. "Karel," the Dralasite whispered, "I wanted to talk to you about that 487."

"Just a moment," Curda whispered back as their guest launched into another spec-

Efforts to learn more about the Sathar beyond conjecture have proven difficult because no Sathar has ever been captured alive. They commit suicide before they can be taken.

In one tragic case, an entire Sathar ship self-destructed to avoid being captured: that explosion also wiped out a Frontier ship and crew that were attempting to board it.

In other instances, freeze fields were applied to several Sathar moments after they were killed in combat. Medical researchers later tried to revive them, but were unable to find a method that worked.

"To use a Human expression that I have recently heard," Zarhomma said, "the mass suicide of the Sathar scares the hell out of me."

"Why is that?" Curda asked.

"While there have been cases of S'sessu doing—what would you call it? Acts of bravery that lead to certain death. In that case, it might provide some feeling of personal reward—although it is a very brief experience. But mere mass suicide is a complete waste of individual persons." Zarhomma took a sip from his cup before continuing. "A S'sessu would surrender and seek either to ransom zirself. Or, if suitable, change allegiances."

Jallee let out a harsh bark and pointed at Zarhomma. "With attitudes like thatwanting to save your own skins—that is why many in the Frontier don't trust the S'sessu, no matter which clan you belong to. You have several clans, right?"

Zarhomma folded its tentacles. "To answer your question first, yes, Phri'sk is home to what you would loosely call nations. They are more than clans. The nation I claim allegiance to, the S'sostra, is the largest and most powerful that is overseen by the All-Seeing Golden Terror."

The S'sessu took another deliberately long drink from its cup. "Trust, respect, and

loyalty are assets that are earned in my culture. When someone secures a status of undeniable esteem, no S'sessu would ever betray that person, even unto death."

The hiss of the flames from the fire pit appeared to be loud as everyone sat for a moment. Finally, Jallee spoke again, "I do not mean to insult you, First Peer Zarhomma, but we have our doubts."

"I take no offense, but I have some news that may eliminate your doubts," Zarhomma said.

"What might that be?" Curda asked, putting the bone knife down on a table beside

"It is what causes the Sathar mass suicides." Zarhomma said. "One of the whitepapers issued a previous Sathar Summit speculated that they use hypnotic indoctrination to cause death under certain circumstances."

Yal spoke up, "I remember that report, but it was very hypothetical."

"There's never been any hard evidence of the extent of Sathar mentalist powers either," added Harrae.

"In rare instances, some S'sessu have exhibited hypnotic mentalist ability," Zarhomma said. "It is a power that goes far beyond, I think you call it, parlor tricks. I imagine the Sathar would have this ability and maybe cultivated it to a higher form including a type of suicide order."

"But I still can't understand why hypnosis would cause dozens or hundreds or thousands of beings to want to commit suicide all at once," Vir'Skul said. "Surely there must be some who resist the training or can't be hypnotized at all."

"I agree. There is more to it and I have discovered something that I will call the Sathar suicide mechanism," Zarhomma said.

Leaning forward, Curda asked, "What is that? How did you discover it?"

"I could wait for my address in two days, but I have a few other surprise insights for then, so I will tell you now," Zarhomma said. "On the month-long trip from Phri'sk to Gran Quivera, my team and I dissected the two specimens that were sent to us. And we looked over the virtual forensic dissections that Star Law provided. We found something that your pathologists overlooked."

Zarhomma paused to take another drink, probably enjoying the fact that he had their rapt attention, Curda thought.

"At the base of each Sathar's brains, where the arteries come in, there is a biological construct."

"A biological construct?" Vir'Skul asked.

"Yes. It is not a natural organ," Zarhomma said. "It is not found in the S'sessu. I believe it is implanted in Sathar wormlings. I believe it is this mechanism that activates and cuts off the blood flow to their brains. This occurs when certain conditions, such as capture, trigger the hypnotic suicide order."

"So you and your team discovered this while en route to Gran Quivera?" Curda asked.

"Yes. It is a great accomplishment," Zarhomma said proudly.

"Is it just you and your team that know this?"
"Yes, but I have even better news!"

"What is that?" Yal pipped in.

"We believe we know how to deactivate the suicide mechanism. Think of the possibilities this would allow! For instance, if the Star Law or some other group manages to stun a Sathar and keep it unconscious, you could bring it to a research facility, and turn off the bio-construct. Once the prisoner is revived, you could interrogate it." Zarhomma sipped from its cup. "Now, would this knowledge would earn the S'sessu the respect of the Frontier's people?"

Curda stood, nodding. "I congratulate you First Peer Zarhomma. I think you've uncovered one of the Sathar's great secrets." His voice was mournful. "But that means I have to implement Directive 86."

Yal grabbed Curda's arm. "Karel, what is directive..." The Dralasite's question was cut off as the Model 487 service robot standing next to them sudden sprung out a second pair of arms. These were armed with shock gloves. It struck Yal.

Since the Dralasite was holding his arm, Curda received a portion of the electrical shock. The room swirled for a moment but he broke free from Yal's grip.

Chaos reigned as the service robots were now attacking everyone else.

Unarmed, and only dressed for a social outing—not that Yazirians wore much in the way of clothing—the twins made a run for the front door

From the mezzanine, the CR-357 began firing down at the twins with its two laser rifles. Harrae collapsed as a beam struck her square in the chest.

Bloodied from an attack by one of the ordinary service robots, Vir'Skul pushed it down. Moving quickly for an elderly academician, he skittered on his eight legs for the exit to the balcony.

Seizing the crystal vase from the nearby stand, Curda intercepted him. Viciously he

brought the vase down on the Vrusk's head several times until the dean of diplomatic studies went still.

Two badly wounded Star Law rangers burst into the house as Curda became aware of the gunfire from outside.

Before the officers could do anything, the CR-357 jumped down from the mezzanine. Wielding the vibroknives mounted on its second pair of arms it attacked them.

A security robot came in the front door a moment later. The two robots made short work of the rangers.

Silence soon reigned.

"Ka-karel... Why?" gasped Yal, who had collapsed on the floor. It reached up pleadingly with one rubbery gray arm.

"I think you would have done the same for 1 million in credits." Curda then made a gesture to the Model 487, which put the Dralasite out of its misery.

He glanced over at the bodies of the Yazirian twins. Jallee lay face down on the floor, where he apparently died in a futile effort to save his sister. Harrae was on her back, with smoking holes in her chest from the laser fire. Her lifeless eyes pointed up at the ceiling.

From behind him came Zarhomma's raspy breathing. The S'sessu was being saved for last. Two service robots held it down.

Curda picked up the Sathar bone knife, which had been knocked to the floor.

"I heard what you said. You betrayed your friends," Zarhomma accused.

"It was necessary," Curda said.

"Look, if your loyalty can be bought, I can pay you far more than a million credits."

Curda crouched down. Taking ahold of one of the S'sessu's upper tentacles, where the robots had flayed open the skin, he squeezed.

Zarhomma yelped.

Curda brought the bone knife up to the S'sessu's head. "Listen, fat worm, this isn't about credits or even 30 pieces of silver."

"I do not understand what you mean."

"Then understand this. My masters know who you are and what you are. Even if your race doesn't remember. But, more importantly, they know where the S'sessu live."

"You... you are one of those Sathar agents." Zarhomma realized. "This... killing me... killing your friends will not help you."

"Oh, but it will. Your death and that of the other S'sessu in your party will be blamed on a fringe group here in the Frontier called the Anti-Satharian League. It will sow anger and distrust between you worms and the Federation. We can't allow you and the Core Four to become allies." Curda stuck the bone knife

into the S'sessu, severing both of its belly nerve cords with one stroke.

The S'sessu's body spasmodically shuddered. Plum-colored blood splashed over his shoes. Curda watched while the light faded from the worm's eyes.

He looked up at the Model 487. It was not actually a Pan Galactic service robot but rather one developed by a Sathar ally, the Zurraqqor. Known as a rogue robot, it could mimic the appearance of Frontier robots. Its greatest asset was being able to reprogram other robots wirelessly—and quickly—by manipulating their electrical fields.

A rogue robot had once caused havoc aboard a Pan Galactic starliner known as the Omicron. The robot provided for tonight's occurrence was far more advanced and controlled by his masters.

Curda stood. He felt no remorse or guilt. He didn't really feel any emotion.

He vaguely remembered the time that the Sathar first caught his research party while exploring the Tetrarch ruins on Laco. Then there were the other encounters and how they had implanted something in him, but it didn't bother him.

Rarely did anything really bother him anymore.

"Go and seek out the S'sessu's compatriots," Curda told the rogue robot. "They need to be Eighty-Sixed."

Walking alongside the robot, he headed for the front exit.

A hand grabbed his left foot as he passed the Yazirians' bodies. Something scraped his lower leg.

A sickening cool feeling washed over him as he kicked away Jallee's hands, one of which was holding a bloodied, sharp piece of jagged metal... It was his blood, not Jallee's or Harrae's, Curda realized.

"Damn you!" Jallee managed to say before one of the passing service robots noticed the Yazirian was still alive and beat him until he was dead.

Curda fell to the floor, clutching at his lower leg, which was flayed open to the bone. Every few moments, bright red blood spurted from the wound. Futilely he tried to apply pressure to the wound. He knew that Jallee had sliced open an artery.

"Wait, wait!" Curda called out to the rogue robot. "I need help here first. Come and help me!"

The robot paused a moment, it's head swiveling so its sensors looked at him. But it was only a moment. It led the other robots out of the mansion as they moved off to Port Loren.

THE FIENDISH PLOT OF SATHAR CLAN X

BY JOSEPH CABADAS

The Sathar, those evil pernicious worms, the scourge of the galaxy, have come up with another terrible plot to sow chaos and despair amongst the vulnerable Frontier colonists.

After this scheme was discovered, Star Law gave it the codename "Project LaserSlave."

As the masters of cybernetics, Clan X took its slavebot technology and shrank it down. Instead of replacing large portions of a slavebot's brain, they can now take over and control the minds of foolhardy subjects through a "cyber latch."

How does it work? It's much the same way the cyber carapace on a cybernuk is able to free itself from a dead specimen and take over another host. (See Frontier Explorer, issue 6, for the "Cybernuk of New Pale" by Eric "Iggy" Winsor for more information).

The first reported case of the LaserSlave was on Laco (Dixon's Star) when human colonist Billy Dunkin, a teenager, purchased a used laser rifle from Slarz Second Chance Weaponz in the city of Point Glass. From what Star Law was able to reconstruct, Dunkin took his new weapon to the outskirts of the community for target practice when the stock of the rifle suddenly bound to his arm.

The LaserSlave is no ordinary laser rifle.

The Sathar device injected nano-probes into Dunkin, altering his appearance and demeanor. He became a homicidal maniac, ready to burn down friends, family, and adversaries with his super powerful laser cannon.

THE TRAP SPRINGS

A character who touches a LaserSlave rifle and prepares to fire it must make a Reaction Speed check to avoid having the device latch on to their arm.

Once the LaserSlave attaches, the character gets to make a Logic check with a +20 modifier to avoid being taken over by the device. He would then be able to make a Strength check with a -20 penalty to try to get the device off.

For every turn that the LaserSlave remains attached, the character continues to make Logic checks, but the device gets a cumulative +5 bonus each turn reducing the character's LOG bonus.

For example, on turn 2 when the device attached to Dunkin, he only had a +15 percent bonus on his LOG check. On turn 3, Dunkin only had a +10 percent bonus for his LOG check.



While he kept making his checks, he was unable to dislodge the device. By turn 6, Dunkin had a -5 percent penalty for his LOG which he then failed.

A character may get an Intuition check to notice that the weapon is not an ordinary one at all, but rather a Sathar LaserSlave! However, the referee can always throw in a big negative modifier. For example, if the character is in the middle of a firefight and needs a weapon and spots a laser rifle that just happens to be lying around, he might get a -20 percent penalty to an INT check.

The LaserSlave is a new way for the Sathar to create slavebots quickly without the need of extensive surgery to remove parts of a victim's brain and implanting robotic components. It quickly turns captured Frontiers beings into cheap cannon fodder while causing many a UPF soldier to hesitate firing at those who were once their friends and family members.

Initially tested just prior to the Second Sathar War, Sathar Clan X seeded a few of the weapons on select areas of Frontier worlds where violence was common or weapons

were needed to fend off wildlife—such as Outer Reach in the Dramune system or New Pale (Truane's Star) with its large dinosaurs on some continents.

From its exterior, the device appears to be a large beam weapon, about the size of a Frontier laser rifle. Almost half of its length appears to be a clear plastic tube with black rings inside. This part is where the insidious Sathar cybernetic control system is. Once a victim places his forearm—or in the case of a Dralasite, an "arm" limb, or a tentacle in the case of a S'sessu—the weapon begins to bond to the user.

The Sathar, of course, know that a character might be able to rip their arm out of the LaserSlave before the bonding takes place, so victims are often restrained.

UNDER THE LASERSLAVE'S CONTROL

A controlled character takes on slavebot-like looks—in the case of humans, the skin turns grey and the eyes take on a reddish hue. A Vrusk's coloration will also begin to turn

gray; Dralasites turn a charcoal gray; the fur on Yazarians lose their luster and color, rapidly turning white; etc.

Once under the LaserSlave's control, the slavebot will fire upon any character or robot that hasn't been designated as a Sathar or a friendly. The Sathar can apparently control the slavebots remotely, directing them to recognize Core Four and other beings who are Sathar agents and, thus, should not be attacked.

The weapon has the same range and firing characteristics as a Frontier laser rifle, but it has a double capacity powerclip—42 SEUs instead of 20. LaserSlave is typically set at 5 SEUs and the slavebot will keep firing until the powerclip is expended.

The slavebot has a base 40 percent chance to hit regardless of the character's dexterity or previous weapon skill. The slavebot will never use the last 2 SEUs in the clip because that powers a self-destruct device.

Slavebots typically don't take careful aim and will fire at the nearest enemy—unless remotely directed. A character could be targeted by several LaserSlave controlled slavebots at one time.

If a target demonstrates that it has protection from laser fire—because of an albedo screen—the slavebot would then fire on another target unless the protected character is the only one visible.

Once the power is expended on the Laser-Slave, the slavebot will attempt to retreat to a place where it can get a new powerclip or recharge. It will use melee combat to try to escape any attempt at capture—again with a base chance to hit of 40. The slavebot will use the LaserSlave as a club because the weapon is very durable.

The LaserSlave's powerclip is incompatible with Frontier weapons or traditional Sathar weapons, but they can plug into Frontier recharge stations. It will recharge at a rate of 5 SEU per turn. A slavebot is programmed to seek out such recharge stations.

CONTROL/REMOVING THE LASERSLAVE

Sathar control devices appear to be designed to command up to five LaserSlave slavebots within a five kilometer range. A Sathar robot brain, with the appropriate program and radio communications gear, can control up to five slavebots per level.

For example, a level five brain can command up to 25 slavebots. A Sathar computer with the proper program and communications gear can command up to 20 slavebots per level.

Radio jamming can prevent a slavebot from being remotely controlled, but it will revert to the LaserSlave's normal programming, which is to seek and destroy all non-Sathar characters within sight.

The LaserSlave can only be removed in one of four ways—a Sathar control device, the death of a slavebot, surgery, or limb amputation. It is theoretically possible to reprogram the LaserSlave, but no one has succeeded in this effort.

Only a remote control device that has been previously "keyed" to a particular LaserSlave can command the slavebot, including giving the code to release the weapon from the victim. Robot brains and computers can be reprogrammed to release those victims under its control.

When a character dies—drops below -30 Stamina—the device will release itself from a victim. It can only take control of someone if a forelimb is thrust into the "bonding portal"—i.e. the clear plastic tube.

Beings below -30 STA are, of course, irretrievably dead. It may be possible to simulate such death and fool the device.

Surgical removal is possible, though very dangerous to the victim and anyone within 2 meters. The last 2 SEU in the LaserSlave's battery pack is used to trigger a self-destruct/anti-tamper device that is deep within the weapon.

If the device is set off, it will cause 5d10 points of explosive damage to the slavebot. The explosion destroys the weapon's internal workings, and causes 2d10 points of damage to all beings and objects within a 2 meter radius.

The LaserSlave's self-destruct mechanism can be disarmed, but a non-Sathar trained character suffers a -40 percent penalty. It is easier to try to remove the powerpack—at a -25 percent penalty—without setting off the anti-tamper device.

If a slavebot is encountered when it is switching powerpacks, it is possible to stun the victim or, if one is close enough, prevent it from rearming the weapon. If this works, it negates the self-destruct device.

Once the anti-tamper device is disarmed, major surgery is needed to remove the LaserSlave, with a -20 percent penalty. A failure results in the need for a new attempt. An automatic failure roll (96-100) results in a limb amputation, though it will free the victim of the device's control.

Limb amputation can, of course, remove the LaserSlave's control of the victim, but if the wound is not cauterized and sutured. blood loss will kill the character. The victim will lose 1d10 points of Stamina per turn,

LASERSLAVE

Cost: N/A Weight: 6 kg

Damage: 1d10 per SEU **Ammunition: 42 SEU Clip**

Defense: Albedo

Range:

PB: 0-10 m

S: 11-40 m

M: 41-100 m L: 101-200 m

E: 201-400 m

representing blood loss from severed arteries/veins.

Attempts to reprogram the LaserSlave can be done, with a -20 percent penalty after the anti-tamper device has been disarmed.

VICTIMS CONSCIOUS OF ACTIONS

The Sathar extensively used LaserSlave slavebots during the liberation of Outpost One during the Second Sathar War. The UPF Landfleet encountered thousands of prisoners who had been turned into slavebots, resulting in a great loss of life.

Victims rescued from the devices control reported being fully aware of what was going on around them, but were often unable to do anything or communicate with others. Strong-willed characters, though, were able to mitigate some of the weapons commands.

Some victims have been able to deliberately miss when the LaserSlave ordered them to fire at a target. For this to work, the slavebot needs to make a Logic roll with a -20 penalty. The effect lasts 1-4 turns only, requiring another Logic check after that time period expires.

Some former LaserSlave slavebots reported that they were able to retreat or not fire the weapon at all. For this to work, the victim needs to make a Logic check with a -30 penalty. The effect lasts 1-4 turns only, requiring another Logic check after that time period expires.

Finally, some freed slavebots later reported that they were able to fire at sathar or sathar allies (including robots and cyber-attack monsters) instead of their intended target, but this requires a Logic check with a -40 modifier. The effort lasts only one turn.

Mentalist characters who make a successful telepathic or empathic link with a LaserSlave victim can boost their resistance checks by +30 and double the length of time that they can resist the device's control.

KNOW THY ENEMY: EXAMINING SATHAR ROBOTS

BY JOSEPH CABADAS

An intractable enemy of every Frontier being, the sathar have a number of different robots at their disposal.

What follows is an examination of the few that have been examined to date.

SNAKEHEAD ATTACK ROBOT

This attack robot, nicknamed "Snakehead" by the UPF, was first encountered in the sathar monitoring station on Volturnus. It is apparently a very old design that is larger than the average standard robot.

Described by explorers from Truane's Star as a "horrid-looking robot," it has a two-meter-long, snake-like metal body supported by treads. The robot has four limbs, each usually carrying a weapon.

The Snakehead encountered on Volturnus carried a laser pistol in each of its front limbs with a powerclip at a setting of 4 SEU. The rear limbs each carried a doze grenade. It could be armed with other weapons.

If the robot uses its ranged weapons held by its top limbs, it will only get one melee attack per turn. Or it can perform two melee attacks in a turn if no ranged weapons are used.

SNAKEHEAD

ATTACK ROBOT

Level: 4

Size: sathar attack robot

Power: sathar battery, Type 2

Movement/ Type: tracked, 25 m/t

Limbs: Four tentacles

Equipment: protection plate — 1; secure compartment; security lock 4; Infra-red (IR), ultra-violet (UV), visible light scanners; Sathar short-range radio (25 kilometers).

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: front limb, laser pistol, set at 4 SEU; front limb, laser pistol, set at 4 SEU; rear limb, doze grenade.

Melee Damage: tentacles (4d10)

Defenses: None

Attack: 70 IM/RS: 7/70

Stamina: 200



WARTIME UPGRADES

After prolonged conflicts with the UPF, the sathar began upgrading its old attack robots. One limb received a laser carbine—basically an enlarged pistol with better range—set at 8 SEU with an 80 SEU power pack. The ranges of the carbine are: PB 5/S 30/M 75/L 150/E 300.

The second limb received a submachine gun. This weapon has the same range as a semi-automatic pistol but it fires bursts of 10 bullets. It has enough ammunition for 10 bursts.

The Snakehead's rear limbs still held a grenade, but they were upgraded with shock gloves that were powered by a 50 SEU pack. That way, the robot would have the options of conducting either a normal melee attack, an electrical attack, or an

electrical/stunning attack.

Instead of moving at a ponderous rate of 25 meters per turn, the Snakehead's traction system was replaced so it could then move at a maximum speed of 50 meters per turn.

DEATHSMAN COMBAT ROBOT

Also encountered during the Battle of Volkos, the "Deathsman" combat robot appears to be a standard sathar design.

The Deathsman has a barrel-shaped body with two ordinary manipulators that would hold the laser rifle while the lower tentacles can wrap around opponents and hold them or flail at them for 4d10 points of damage and powered by a 50 SEU pack.

SNAKEHEAD

COMBAT ROBOT

Level: 4

Size: sathar standard

Power: sathar battery, type 1

Movement/Type: tracked, 120 m/t

Limbs: four tentacles

Equipment: protection plate — 1; secure compartment; security lock 4; Infra-red (IR), ultra-violet (UV), visible light scanners; sathar short-range radio (25 kilometers).

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: laser rifle (set at 4d10)

Melee Damage: tentacles (4d10)

Defenses: none

Attack: 70

IM/RS: 7/70

Stamina: 100

WARTIME UPGRADE

About the time of the Second Sathar War, the Deathsman robots received a series of upgrades. At first, it was given an exterior sheath of partial polyplate armor.

Acting like a combination albedo suit and skeinsuit, the armor absorbs half damage from all beam and physical attacks while the other half gets through to the Deathsman. Once the sheath has absorbed 100 points of damage it stops protecting the robot.

The lower tentacles were outfitted with shock gloves that are powered by a dedicated 50 SEU pack.

MEGADEATH WARBOT

The "Megadeath" warbot was encountered during the Battle of Volkos on Volturnus. It was armed with a heavy laser and a machine gun, both mounted in the body of warbot while its four tentacles were free for melee attacks.

This appears to be a fairly cheap model for the sathar to build and comes in Deathmatch hover and the Death Shrike VTOL versions.

WARTIME UPGRADES

After prolonged contact with the Frontier, the sathar created several variants and upgrades including giving it partial polyplate sheathing (100 points).

MEGADEATH

WARBOT

Level: 5

Size: sathar heavy-duty

Power: sathar battery, type 2

Movement/Type: tracked, 120 m/t

Limbs: four tentacles

Equipment: protection plate — 1; secure compartment; security lock 5; infra-red (IR), ultra-violet (UV), visible light scanners; surface/air search radar (5 km range); radiophone (500 km range).

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: heavy laser, mounted on small turret, set at 10 SEU per shot; ammo: 100 SEU battery, Machine Gun, mounted on small turret, Dmg. 10d10, Ammo: 10 bursts

Melee Damage: two attacks by tentacles, each doing 6d10

Defenses: None

Attack: 70

IM/RS: 7/70

Stamina: 500

All models also received EMP shielding, which is 70 percent effective against Electromagnetic Discharge (ED) weapons. A successful hit from an ED warhead though would only stun the warbot for 1d10 turns until its system rebooted.

"Mega Missile Death" was an upgrade with 4 small rocket launchers, with an auto loader and 40 rockets. The launchers replaced the heavy laser and machine gun.

Another version replaced the machine gun with a grenade mortar and 20 grenades.

Two of the tentacles were also outfitted with shock gloves, which were powered by a 100 SEU pack.

DEATHMATCHHOVER WARBOT

This is the hover version of the Megadeath warbot. It has a top speed of 200 kilometers per hour (kph) and a cruise speed of 60 kph (100 m/t). It acceleration/deceleration rates are 80/40 meters per turn and a turn speed of 70 m/t.

If struck by weapon fire, apply damage as normal but also roll on the Vehicle Damage Table (Alpha Dawn Expanded Rules, p 32). Add 2 to the result.

WARTIME UPGRADES

Before the Second Sathar War, the Death-

match Hover warbot received partial polyplate sheathing (100 points) and EMP shielding. A few versions were converted into mobile rocket launchers with 4 small rocket launchers, with an auto loader and 40 rockets. The launchers replaced the heavy laser and machine gun.

Two of the tentacles were also outfitted with shock gloves, which were powered by a 100 SEU pack.

DEATH SHRIKE VTOL WARBOT

This flying warbot shares many of the components of the Megadeath warbot. While flying, it has a top speed of 300 kilometers per hour and a cruise speed of 50 kph (83 meters per turn). Its acceleration/deceleration rates are 80/40 meters per turn and can conduct nap of the earth flying and other VTOL movements.

If struck by weapon fire while flying, apply damage as normal but also roll on the Flying Vehicle Damage Table (Alpha Dawn Expanded Rules, p 33) for other effects. Add 2 to the result.

The Death Shrike also has six legs as a secondary form of movement while on the ground, with a walking speed of 10 meters per turn and a maximum speed of 20 meters per turn. When this warbot is on the ground, do not use the Flying Vehicle Damage Table.

WARTIME UPGRADES

Newer Death Shrike received EMP shielding by the time of the Second Sathar War, but apparently polyplate sheathing was too heavy. Instead, the flying warbot was outfitted to hold either two small rocket pods—each carrying 12 rockets—or could carry two bomb racks that could hold either two small or one medium bomb each.

Two of the tentacles were also outfitted with shock gloves, which were powered by a 100 SEU pack.

DEATHCUP CYBOT

The "Deathcup" cybot was encountered on Volturnus during the final battle. It was designed to look like a sathar and contained a satharoid brain when later examined. It is theorized that the Sathar might use cybots to preserve the essence of Middle Caste or Upper Caste warriors who were courageous in battle. Another theory is that these brains came from prisoners who

DEATHCUP

CYBOT

Level: 5

Size: anthropomorphic (satharoid)

Power: sathar battery, type 2

Movement/Type: slither, 90 m/t

Limbs: four tentacles

Equipment: protection plate — 2; secure compartment; security lock 5; infra-red (IR), ultra-violet (UV), visible light scanners; radiophone (500 km range).

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: man-portable weapons

Melee Damage: two attacks by tentacles, each doing 2d10.

Defenses: none

Attack: 80

IM/RS: 8/80

Stamina: 100

were selected for a gruesome punishment by being separated from their bodies.

On Volturnus, the Deathcup was only armed with a gyrojet rifle, but like any combat robot, it can take up any arms that are available. It should even be able to hold small heavy weapons including lasers, sonic devastators, recoilless rifles, rocket launchers, and the like without the need of a tripod.

Along with the normal suite of robot programs (roboprogs), the Deathcup probably has the Sathar equivalent of a facial recognition program, a voice simulator, which presumably can mimic the voices of the Core Four races without the lisp of a Sathar, along with programs to aid in analyzing communications transmissions, optimize signal reception, and even jam enemy signals with a 5 kilometer range.

It is also believed that this cybot has a medical program that would allow it to operate as a level 4 medtech. Other versions may have a robotics repair program, giving it the ability of a level 4 robotics specialist. It seems like it has a security grid program, which allows the Deathcup to go dormant for long periods of time to conserve power, but it can quickly reactivate if something comes within 5-10 meters of it.

WARTIME UPGRADES

The Sathar gave the Deathcup Cybot several upgrades by the time of the Second

Sathar War, including providing shock gloves powered by a 50 SEU battery pack for its lower tentacles, an anti-shock implant, plus albedo and inertia screens that were powered by a dedicated 100 SEU pack.

SILVERCUP CYBOT

This is an advanced variant of the Deathcup. Although no hard evidence of this type of cybot has been recovered, Star Law and other UPF intelligence agencies believe this deadly cybot does indeed exist.

The appearance and general statistics for the Silvercup are very similar to the Deathcup, but the Silvercup is a level 6 cybot with self-awareness. It can control other Sathar robots and even slavebots. In fact, it is believed that the brain of the Silvercup comes from an Upper Caste member who distinguished itself in battle rather than some sort of prisoner.

It can also be equipped with facial recognition, voice simulator, communications, security grid, medical, robotics repair, technician, and other programs as a referee will allow.

ATT: 90, IM/RS: 9/90, STA: 100. Its sensors would also include Shape, Sonar, and Scent (50 meter range). It originally was equipped with inertia and albedo screens, both powered off of a 100 SEU pack.

WARTIME UPGRADES

The Sathar upgrades for the Silvercup included adding a holographic generator, so the cybot could attempt to camouflage itself, along with radar, IR and UV jammers. The cybot received a partial polyplate sheath and EMP shielding along with an anti-shock implant.

The upper tentacles received built-in shock gloves, powered off of a 50 SEU pack. The lower limbs were given a melee weapon that the Frontier calls the "buzz saw."

The buzz saw causes 3d10+10 points of inertia damage to a target. It uses 2 SEUs per hit and is powered off of the same powerpack as the shock gloves. It also provides the cybot with a +20 percent bonus check to prevent falling during a climb.

S.A.S.E. SATHAR ATTACK SIMULACRA EXTERIOR

The SASE robots were first encountered on the planet Starmist (Sundown) when they

S.A.S.E.

SATHAR ATTACK SIMULACRA EXTERIOR

Level: 4

Size: sathar standard reinforced

Power: sathar battery, type 1

Movement/Type: 50 km/h on level ground; lift/ hover unit

Limbs: four tentacles

Equipment: protection plate 1; security lock 4; infra-red (IR), ultra-violet (UV), visible light scanners; surface/air search radar; IR/UV jamming systems, laser searchlight; radio/radar jamming unit.

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: rocket launcher with (4) rockets; electric defense field (touch - 3d10); sonic stunner/arm; laser rifle/arm (5 SEU/shot)

Melee Damage: the secondary tentacles are used for heavy lifting. As weapons they strike for 2d10 damage each, at single or twin targets. Range of the arms is 3 m.

Defenses: albedo skin insulation (100 points) holoscreen generator

Equipment: self-destruct—as fragmentation grenade

Attack: 70

IM/RS: 7/70

Stamina: 140

began attacking Frontier citizens and a Heliope village.

This specialized robot appears to be used by Sathar espionage organizations. It is equipped with a holoscreen generator and jamming equipment, making them difficult to detect and destroy.

The SASE also has a self-destruct mechanism that can be triggered by voice command or when the robot becomes disabled. It will explode with the force of a fragmentation grenade (8d10), causing damage to anything within a 3 meter radius.

WARTIME UPGRADES

The SASE's albedo insulation was replaced with a partial polyplate sheath (100 points) to help defend against both energy and inertia attacks.

S.A.S.I. SATHAR ATTACK SIMULACRA INTERIOR

The SASI robots were first encountered by Frontier citizens on the planet Starmist (Sundown). They were used to protect the

S.A.S.I.

SATHAR ATTACK SIMULACRA INTERIOR

Size: sathar standard reinforced

Power: sathar battery, type 1

Movement/Type: 50 km/h on level ground; lift/ hover unit

Limbs: four tentacles

Equipment: protection plate 1; security lock 4; infra-red (IR), ultra-violet (UV), visible light scanners; surface/air search radar; IR/UV jamming systems, laser searchlight, radio/radar jamming unit.

Roboprogs: attack/defense, computer link, search and destroy, self defense

Weapons: rocket launcher with (4) rockets; electric defense field (touch - 3d10); auto-pistol/arm (ammo 30; no reload req.); auto-pistol/arm (ammo 30; no reload req.); stun pistol-fires forward only in direction robot is facing.

Melee Damage: the secondary tentacles are used for heavy lifting. As weapons they strike for 2d10 damage each, at single or twin targets. Range of the arms is 3 m.

Defenses: albedo skin insulation (100 points); holoscreen generator; Self-destruct.

Equipment: self-destruct—as fragmentation grenade

Attack: 70 IM/RS: 7/70

Stamina: 125

interior of a Sathar base.

Like the SASE, the SASI has a self-destruct mechanism that can be triggered by voice command or when the robot becomes disabled. It will explode with the force of a fragmentation grenade (8d10), causing damage to anything within a 3 meter radius.

WARTIME UPGRADES

The SASI's albedo insulation was replaced with a partial polyplate sheath (100 points).

COCKROACH **SECURITY ROBOTS**

A common security robot of Sathar Clan Y, the "Cockroach" was first encountered by members of a UPF Planetary Survey Administration's mission. At first, Frontier scouts thought there were several classes of this design of robot because they had different propulsion system. But upon further examination of the robots' remains, it was discovered that the Cockroaches had a modular design, allowing the Sathar to easily swap out one movement system for another.

The Cockroach has a rectangular shape and is one meter long and 0.5 meters wide. Instead of limbs, it has four miniature turrets, each holding a pistol-size weapon. These weapons and their ammunition are incompatible with that of the Frontier.

These robots have very low intelligence and simple programming. Decoys, camouflage, and smokescreens may fool these robots into firing wildly at inappropriate or non-existing targets. Its sensor dome is in a vulnerable position in the center of the robot.

Weakness: If an attacker's die roll tohit against one of these robots is 01-10, it destroys the robot's sensor unit. The Cockroach's attack score is reduced to only 5 per-

Cockroach Type I: When used in this configuration, the Cockroach operates on an overhead track and runs off of the power source of a Sathar ship or installation. It has a laser pistol, normally set at 2d10 per shot (2 SEU) and an Electrostunner, normally set for blast, that both use the same 50 SEU pack. Another turret has a Sonic Stunner with a 20 SEU clip and a Needler Pistol with 10 shots.

Its movement rate is considered Slow, at 20 meters/turn.

Cockroach Type II: Instead of using an overhead track, the Cockroach II is outfitted with compressed air jets for moving around in a weightless environment inside a spaceship. It can thrust up to 60 meters per turn.

When encountered, the four miniature turrets were outfitted with two laser pistols, set at 2d10 per shot (2 SEU) and shared the same 50 SEU powerpack. It also had two automatic pistols, each with 20 rounds.

Cockroach Type III: In this configuration, the Cockroach is mounted on treads and a top speed of 80 meters per turn. When encountered, the four miniature turrets were outfitted with two laser pistols, set at 5d10 per shot (5 SEU) and shared the same 50 SEU powerpack. It also had two automatic pistols, each with 20 rounds.

Cockroach Type IV: In this configuration, the Cockroach is mounted on a hover unit with a top speed of 40 meters per turn. When encountered, the four miniature turrets were outfitted with two laser pistols, set at 5d10 per shot (5 SEU) and shared the same 50 SEU powerpack. It also

COCKROACH

SECURITY ROBOTS

Level: 2

Size: sathar light duty reinforced

Power: sathar battery, type 1

Movement: varies

Limbs: none

Equipment: protection plate 1; security lock 2; infra-red (IR), ultra-violet (UV), visible light

Roboprogs: attack/defense, computer link, Search and Destroy.

Weapons: 4 pistol-size weapons mounted in small turrets.

Melee Damage: none

Defenses: none

Attack: 50

IM/RS: 5/50

Stamina: 75

had two automatic pistols, each with 20 rounds.

SPIDER WORKBOTS

A common workbot of Sathar Clan Y, the "Spider" was first encountered by members of a UPF Planetary Survey Administration's mission. Like the Cockroach, this robot is modular with interchangeable propulsion systems including a version that ran on a specialized track, a compressed air jet for weightless environments, a tracked version and a hover version.

It has four delicate manipulators that fold up into the chassis with various fittings at the end of each limb plus two sensor arms.

Although the workbots are normally not armed, unlike many Frontier maintenance robots, they are equipped with attack/defense programs and can take up arms to defend themselves. A Spider workbot often accompanies a Sathar Clan Y individual wherever they go.

Each workbot is linked to a ship's or installation's computer or to any handheld computers that the sathar is using. These robots perform physical labor and Clan Y's dependence upon these workbots is a potential weakness that enemies can exploit.

The Spider workbot resembles a 50 kilogram cylinder that is 1.5 meters tall and 0.4 meters wide.

Weakness: If the die roll for an attack against one of these robots is 01-05, it de-



SPIDER

WORKBOT

Level: 2

Size: Sathar Light Duty Reinforced

Power: Sathar battery, Type 1

Movement: Varies

Limbs: 4 Tentacles

Equipment: Protection Plate 1; Security Lock 2; Standard robotic sensors.

Roboprogs: Self -Defense, Attack/Defense, Computer Link, Maintenance.

Weapons: Normally none, but can wield two pistol-size weapons.

Melee Damage: 2d10 per arm pair

Equipment: Self-destruct mechanism—as fragmentation grenade

Attack: 50

IM/RS: 5/50

Stamina: 75

stroys the sensor unit. The Spider I's attack score is reduced to only 5 percent. Smoke will also cut its to-hit score to 5 percent.

Spider Type I: The Spider I workbot runs on a specialized track that is found in sathar ships and installations. It had a movement rate of up to 60 meters per turn, but it had a limited range of motion. When they workbots were encountered in the Mahg Mar system, they took up two laser pistols, set at 2d10, with 20 SEU powerpacks.

Spider Type II: Used aboard starships and space stations that are in a prolonged weightless environment, the workbot is outfitted with compressed air jets, giving it a movement rate of 60 meters per turn. If the ship is under thrust, these robots hook into one of their other interchangeable movement modules, though usually that is for a special ceiling track that runs around the ship, though tis limits their range of motion.

Again, the Spider is normally not armed, but when encountered aboard a sathar

mothership, the robots grabbed one sonic stunner and one electrostunner, both with powerclips.

This is a workbot using the interchangeable track propulsion system. It has a movement rate of 60 meters per turn and is normally unarmed unless a security alert is

Spider Type IV: This workbot uses a hover unit and has a movement rate of 60 meters per turn. It is normally unarmed.

SATHAR DOCK ROBOT

Used by Sathar Clan Y, the dock robots help with bringing in scout ships to a tender. They also perform cargo transferring and other shipping dock-like work.

The Dock Robot can attempt to ram an opponent for 2d10 points of damage; a defender can make a Reaction Speed check to avoid this type of attack. Another way these robots can attack is trying to grasp a character for 2d10 points of damage.

SATHAR DOCK ROBOT

WORKBOT

Level: 2

Size: sathar standard/Light

Power: sathar battery, type I

Movement: 60 meters per turn; Compressed air jets for weightless environment; Specialized track movement when ship is under thrust.

Limbs: four sturdy grasping arms

Equipment: illumination lamps, magnetic grappling device

Roboprogs: computer link, maintenance, self-defense

Weapons: none

Melee Damage: ramming for 2d10 damage; RS avoidance check Grasping for 2d10 damage

Defenses: none

Attack: 50

IM/RS: 5/50

Stamina: 75

SATHAR HEAVY-DUTY WORK POD

Similar to Frontier workpods, the sathar version is found on starships. With a robotic brain, it can operate independently or it can be remote-controlled or a sathar pilot can go onboard and direct the unit. If an operator is aboard, it can override the robot brain or remote control devices.

These robotic workpods cannot move around inside a ship while it is under thrust. They are made to be used in a weightless environment for various maintenance tasks as well as assisting with docking maneuvers.

SATHAR HEAVY-DUTY WORK POD

WORKBOT

Level: 2

Size: sathar heavy-duty

Power: sathar battery, type 2

Movement: 30 meters per turn; compressed air jets for weightless environment.

Limbs: two heavy work arms

Equipment: Illumination lamps, magnetic grappling device

Roboprogs: computer link, maintenance, self-defense

Weapons: none

Melee Damage: ramming for 6d10 damage with RS avoidance check. Grasping for 6d10 damage.

Defenses: none

Attack: 50

IM/RS: 5/50

Stamina: 500

SATHAR SPACE MANUFACTURING ROBOT

MANUFACTURING ROBOT

Level: 2

Size: sathar standard/light

Power: sathar battery, type 1

Movement: 60 meters per turn; compressed air jets for weightless environment.

Limbs: four sturdy grasping arms

Equipment: standard robot sensors.

Roboprogs: computer link, maintenance, self-defense

Weapons: none

Melee Damage: ramming for 2d10 damage with RS avoidance check. Grasping for 2d10 damage.

Defenses: none

Attack: 50

IM/RS: 5/50

Stamina: 75

SATHAR SPACE MANUFACTURING ROBOTS

Very similar to dock robots, the manufacturing robots are used to make spare parts for the ongoing maintenance of Sathar Clan Y ships.

Unlike most Frontier robots that perform similar tasks, the sathar apparently program their manufacturing robots to be able to defend the ship or installation that they are deployed at. They can attempt to ram an opponent for 2d10 points of damage; a defender can make a Reaction Speed check to avoid this type of attack. Another way these robots can attack is trying to grasp a character for 2d10 points of damage.

SATHAR GROUND **MANUFACTURING ROBOTS**

These simple manufacturing robots are used at ground-based sites to build replacement parts and components. Its statistics are very similar to the Space Manufacturing Robot, but they use a track propulsion system. They have a movement rate of only 20 meters per turn. Like the space-based version, the sathar manufacturing robots are programmed to defend an area from unauthorized personnel by ramming or grasping opponents.

RAVAGER ROBOT ATTACK HOVERCRAFT

A robotic, variable hovercraft of Sathar Clan Y design, the Ravager can range out away from a base. When linked with a main defense computer, the ravagers can be used in

RAVAGER

ROBOT ATTACK HOVERCRAFT

Size: robotic hover vehicle, 2

Power: sathar battery, type 2

Movement: Variable Hover Accel./Decel.: 80/40 m/t Top Speed: 250 m/t Turn Speed: 70 m/t

Limbs: None

Equipment: Sonar, infrared, visible light, and radio

detectors.

Roboprogs: Attack/Defense, Computer Link, Search and Destroy, Self Defense

Weapons: Sathar Heavy Laser set at 8d10, mounted on turret; 800 SEU powerpack

Defenses: None

Attack: 60

IM/RS: 6/60

SP: 150/300

Veh. Dmg. Mod.: +2

coordinated defense and attack maneuvers.

When operating independently—more than 10 kilometers from a base or when its computer isn't being run by skilled operators—the ravager's tactics are more predictable: it fires its laser as it moves around its target at 70 meters per turn in a 15-meter diameter circle. It will fire randomly at unidentified moving or metallic objects.

If a ravager is attacked by gunfire or explosives, use the Vehicle Damage Table and add 2 to the dice roll.

The ravager's heavy laser is mounted on a turret with an all-around field of fire.

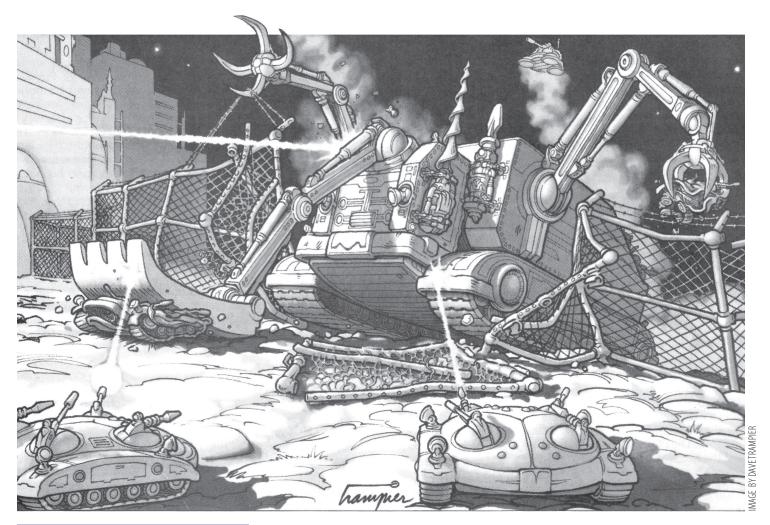
Intelligence Update: While the Ravager does not have a traditional cockpit that would allow a sathar or member of other races to operate this robotic vehicle manually, it apparently has an exterior access port to a cylindrical compartment that is 1 meter tall and a half-meter in diameter.

It is theorized that a tubed-sathar brain. such as the one encountered at the monitoring station on Volturnus, could be "plugged" into the Ravager to operate it.

HUNTER **ROBOTIC MINING AND TRANSPORT UNIT**

Resembling a giant, streamlined dump truck mounted on tank treads, Hunters are robotic mining and transport units.

Drills and digging tools are mounted on its front. An armored blockhouse near the front holds the computer and sensor devices.



HUNTER

ROBOTIC MINING AND TRANSPORT UNIT

Level: 3

Size: robotic hover vehicle, 5

Power: sathar battery, type 2

Movement: Tracked Accel./Decel.: 60/40 m/t Top Speed: 60 m/t Turn Speed: 50 m/t

Cargo: 7,000 kg, 15 cubic meters

Limbs: Three: 1 front shovel/loader, 2 side arms that can be mounted with interchangeable tools including grasping clamps or drills or jackhammers.

Equipment: mining equipment

Roboprogs: mining

Weapons: none

Melee Damage: grasping clamp 6d10; drill arm 10d10

Defenses: none

Attack: 60

IM/RS: 6/60

SP/STA: 350/700

Veh. Dmg. Mod.: -10

The cargo container takes up most of the rear of the vehicle. Three extending, mechanical arms reach out of the rear of the container. One of the arms has a grasping clamp hand. Another could mount several of the tools such as drills, while the third mechanical arm normally holds sample collectors.

Hunters are not programmed for attack or defense, but their detectors can see vehicles (95 percent) and characters carrying metal gear (80 percent) as sources of highgrade ore to mine.

The unit's grasping clamp causes 6d10 points of damage if it grabs a character. It can also lift 1,000 kilograms. The drill arm causes 10d10 points of damage if it hits a character.

If a hunter is attacked with gunfire or explosives, consult the Vehicle Damage Table. Subtract 10 from the dice roll when using the table.

A Frontier robotic technician can take over a Hunter unit by altering its mission and functions (with a -20 percent check due to it being an alien design). Members of the Frontier expedition to the planet Snowball used several Hunters as battering rams or transports when attacking sathar bases. Each Hunter could hold 10 characters and their gear in the ore container.

IN CONCLUSION

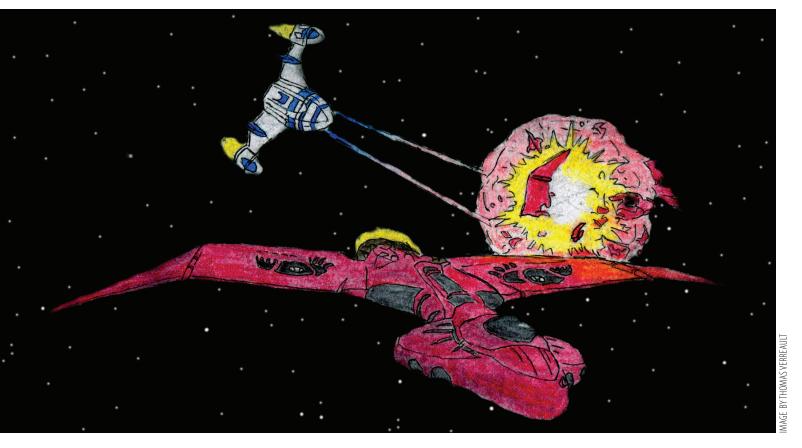
The sathar's design philosophy for most of their robots—especially those that are exclusive to Clan Y—appears to be along the lines of quantity over quality.

Their robots tend to be fairly cheap to make and all those that have been encountered have an ability to attack intruders. Perhaps this is because the sathar face internal struggles, whether it is rebellions by subject races or infiltration and sabotage missions by one clan against another. Much of this line of thought is mere conjecture by Frontier intelligence agencies.

As the sathar had more and more conflicts with the United Planetary Federation, they upgraded a number of their robots to make them more robust. But, these improvements were not made across the board. A number of older warbots, security robots, cybots, etc. never received any upgrades.

The sathar are also capable of building extremely large robotic vehicles capable of operating independently, such as an estimated Hull Size 30 dreadnaught that was called the Juggernaut and space fighters known as Scorpions.

Frontier citizens are warned to avoid contact with sathar and their robots and report any encounters to Star Law as soon as possible.



SATHAR SHIPS IN THE FRONTIER

A SHORT HISTORY OF SATHAR NAVAL OPERATIONS EXCLUDING SW1

BY THOMAS VERREAULT

Editor's Note: This article collects and summarizes all the instances mentioned in the rules and modules of sathar ships interacting with Frontier forces. It draws no conclusions from those engagements but provides an easy reference to Referee's looking to add more sathar ship encounters.

ZEBULON'S GUIDE

The First Sathar War occurred before the formation of the UPF and Spacefleet and while many records were lost the principle engagements were:

The Invasion of Truane's Star where an overwhelming sathar fleet swept aside the meager militia force of Pale and began landing forces on Pale and New Pale.

The Invasion of Dixon's Star where elements of the sathar fleet pursued refugees from Truane's Star and began landing forces on Laco.

The Battle of Cassidine where the ships of the Second Common Muster ambushed and destroyed a larger sathar fleet.

The Battle of Morgaine's World where

ships of the Second Common Muster were forced to engage a large sathar fleet. Admiral Morgaine, commander of the muster fleet, died halting the sathar advance near a planet that would be renamed in his honor.

After the Battle of Morgaine's World, the sathar fleet was broken and the rest of the war was mopping up actions although sathar ground forces fought stubbornly.

KNIGHT HAWKS TACTICAL OPERATIONS MANUAL

The Doliin Bay Incident was a surprise attack on the *UPFS Z'Gata* (frigate), *UPFS Stiletto* (assault scout), and *UPFB Doliin Bay* (space station) by two sathar warships *SAV Venomous* (destroyer) and *SAV Perdition* (heavy cruiser).

The Battle of Fortress Kdikit was a major fleet action involving Task Force Cassidine and UPFB Fortess Kdikit, attacked by the SAV Star Scourge (heavy cruiser), SAV Vicious, SAV Pestilence and SAV Doomfist (destoryers), and SAV Stinger (frigate) supported by 3 attack fighters.

Close Escort was an incident involving a

patrol group, PG 03, comprised of the *UPFS Courageous* (Light Cruiser), UPFS assault scouts *Scimitar* and *Dagger*, *UPFS Megasaurus* (freighter) engaged by *SAV Faminewind* (Light cruiser) and *SAV Nemesis* (destroyer).

The Stand at Ken'zah Kit was an engagement involving *UPFB Ken'zah Station*, *UPFS Z'Rak't Zoz* (minelayer), *UPFS frigates Shimmer* and *Zz'Nakk'T*, *UPFS assault scouts Lancet* and *Rapier* supported by fighters against the *SAV Maelstrom* (assault carrier) supported by fighters.

The Second Sathar War involved multiple fleet actions documented in the Knight Hawks manual that would be too lengthy to cover here. Readers looking for details of those engagements should consult that document directly.

WARRIORS OF WHITE LIGHT

The Osprey Incident involved a sathar agent in the Royal Marines militia attempting to hand over the *CMS Osprey* to the sathar during a cargo inspection of a freighter.

The Battle for White Light was a major

militia engagement by the Royal Marines militia: CMS Leo (frigate), and the CMS assault scouts Wasp, Falcon, Osprey, Flitter, and Swallow, against a squadron of sathar destroyers: SAV Vampire, SAV Deathwind, SAV Devastator. Note that the militia operated aggressively to keep the opposing force as far as possible from Clarion and thus Clarion Station and Fortress Redoubt were not involved.

STAR SPAWN OF VOLTURNUS

The Zebulon Incident involved a major sathar fleet retreating in the face of the arrival of a Spacefleet battle fleet supported by militia units from Truane's Star.

FACE OF THE ENEMY

The Capture of SAV Mothership was executed by the crew of the captured sathar scout ship UPFS Backdoor through a clandestine boarding action. Note that this sathar ship was determined to be an obsolete escort carrier class, refitted for reconnaissance and logistics duties.

WAR MACHINE

The Liberty Incident involved the intercept of an ad hoc militia patrol group by sathar fighters.

Operation Cracker involved the UPFS Flying Cloud (frigate), UPFS assault scouts K'Riss and Doboru against SAV Firestorm (heavy cruiser) and SAV Predator (assault carrier) supported by fighters.

THE XV-1 INCIDENT (ARES #15)

The XV-1 Incident involved an experimental craft vs a sathar frigate.

RAID ON THESEUS (POLYHEDRON #13)

Raid on Theseus was a little known action of the Second Sathar War involving an ad hoc combined task group of Spacefleet and militia service vessels: UPFS Intrepid (light Cruiser), MMS Republic (destroyer), UPFS Zz'Llikk'tt, MMS Heroic (frigates), UPFS assault scouts Dirk, Blade, and Needle, and MMS assault scouts Gnat, Mosquito, Dragonfly, and Wasp supported by UPFB Minotaur Station against the SAV destroyers Villainous, Maggot and Assassin, SAV light cruisers Hellion and Foul, SAV heavy cruisers *Ghoul* and *Spectre*.

BATTLE OF EBONY EYES (DRAGON #88)

Battle of Ebony Eyes occurred in the twin black hole system when ships of Task Force Nova: UPFS Admiral Clinton (battleship), UPFS Honor (light cruiser), UPFS destroyers Chivalry and Faith, and UPFS frigates Electron and Proton were escorting the research vessel UPFS Ensten. They fought off sathar forces: SAVB Nova (fortified space

station), SAV Blood War (hvy cruiser), SAV Famine (light cruiser), SAV frigates Disease and Apocalypse supported by fighters.

THE DAY OF THE JUGGERNAUT (DRAGON #91)

The Day of the Juggernaut involved an incursion in the Scree Fron System by a sathar robotic ship SAV Juggernaut supported by short range Scorpion Class fighters against Task Force Nova: UPFS Admiral Clinton (battleship), UPFS heavy cruisers Zamra and Grak, UPFS light cruisers Courage and Glory, UPFS frigates Shimmer, ZZ'Nakk, Z'Gata, and Driadia, UPFS Assault Scouts Scimitar, Dagger, Rapier, Lancet and Razor.

THE ZEBULON RAID (DRAGON #95)

The Zebulon Raid happened when a Spacefleet patrol group, consisting of the UPFS Arcturon (destroyer), UPFS assault scouts Arrow and Remora, and UPFS Anaconda (freighter), on escort duty encountered ZMS Brtz'krge ("B" cruiser) in the Zebulon system.

The Volturnus Incident involved a Pan Galactic corporate fleet of PGSS Tarnag (Nova class yacht), PGSS Brigadoon (Condor class privateer), PGSS Drag Net (Thruster class privateer), PGSS Miner's Central (corporate owned space station) against Zuraqqor forces ZMS Ktr-Bltz ("B" cruiser) and ZMS *Drlp'mrztd* ("C" cruiser).



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VARIABLE HOVERCRAFT

Some of the Sathar vehicles given here are called "variable hovercraft," which is a term first used by Larry Moore in his "Non-Civilian Duty Vehicles" article in issue 15 of Star Frontiersman magazine. So what is a variable hovercraft?

It is basically a ground-effect vehicle. It can operate like a hovercraft but also has limited flight capabilities for dealing with multitudes of unknown terrain.

For example, the "Hookworm" Hoverbike is given as a variable hovercraft. Normally it would operate no more than 5 meters off the ground. But, when the terrain is rough—mountainous, or has a deep crevasses, seas, etc.—it can fly. However, it is much slower than an aircar or a jetcopter.

The Altitude Conventions Table provides a general guideline for the different ceiling heights for various Frontier aircraft. Note, the altitudes provided are for a more Earth-like planet, but those worlds with much thinner atmospheres, such as a Kraatar or Starmist, would have lower operating ceilings for some aircraft.

ALTITUDE CONVENTIONS TARIF

	INDEL
ALTITUDE	DESCRIPTION
Orbit 260+ km	Stations, spaceships, launches¹
Suborbital 101-260 km	Shuttle/Landers ²
High 31-100 km	Fast transport, inter- continental airliners, weather balloons
Medium 6-30 km	Aircars, jetcopters, cargo- jets, glijets, pressurized airships.
Low 1-5 km	Open-basket balloons, non-pressurized airships.
Very Low Less than 1 km	Variable hover vehicles

- 1. Launches ferry passengers and cargo between a ships or stations in orbit.
- 2. Shuttle/landers are craft designed to ferries passengers and cargo between a planet and orbit.



KNOW THY ENEMY: LOOKING AT SATHAR VEHICLES

BY JOSEPH CABADAS

Very few Sathar canon ground vehicles

"Starspawn of Volturnus" only gave some statistics for a Sathar Automatic Cannon and a ground transport, both of which had structure points. "Face of the Enemy" mentions a crashed rocket sled, but it was inoperable.

"The War Machine" provided statistics for two robotic craft, the Ravager attack hovercraft and the Hunter, which was an automated mining vehicle.

The Ravager and Hunter were detailed in a previous article in this issue: Know Thy Enemy: Examining Sathar Robots on page 15.

What follows are some suppositions on the types of vehicles the sathar should have in their arsenal. And the evil worms would have many others too.

SATHAR VEHICLES

As noted in the TSR modules "Face of the Enemy" and "The War Machine," sathar devices and weapons fall into two categories—those that are designed for use by both the Sathar and their subject races and those exclusively made for Sathar use.

Frontier characters will find they cannot apply their normal skills to decipher these latter products. That restriction would also include the s'sessu—the David "Zeb" Cook optional player character race that is an offshoot of the sathar. The two species have been separated from each other for about 10,000 years.

This restriction permits the referee to deny the use of certain captured sathar artifacts in order to preserve the mystery of this enemy.

Many commonly used items including weapons, tools, computers, and electronics gear have the same or similar engineering principals as those found on Frontier worlds. Additionally, many of these everyday devices were created to be used by sathar subject races.

By studying sathar items, a Frontier character can try to figure out how it works with the normal -20 percent modifier for alien designs. It is up to the referee to determine how much time is needed for a character to actually use it.

TREADWORM HALF-TRACK TRANSPORT

The Treadworm has the movement ca-

pabilities of a track-mobile with a pivot linkage at the wheeled front so it can deal with hilly terrain better. The vehicle can ford rivers up to two meters deep. It is the sathar's general transport vehicle, used for moving cargo, troops, spare parts, and for supplying attack monsters.

It has a simple start-and-go system. It does not have any kind of security locks.

It typically mounts a small heavy laser or a sonic devastator, which would be powered by an onboard generator with a 100 SEU powerpack as a backup battery. Or, it could mount a machine gun with ammunition for 10 bursts along with two spare bullet belts.

When encountered on Volturnus, the Treadworm had a crew of 10 sathar, most of whom were busy with replacing the powerpacks for cybodragons. The transport also had a cargo of 50 sathar powerpacks (about the size of a power backpack, 100 SEU each).

Inside would be a sathar Type 4 power fuel cell generator, which generates 4,000 SEU/hour, capable of recharging 40 powerpacks in an hour or 1 power pack every 90 seconds. The generator runs off of a hydrogen tank good for 10 hours of op-

It could be assumed that the vehicle on Volturnus probably also contained the equivalent of medical triage gear to treat wounded attack monsters, such as

TREADWORM

HALF-TRACK TRANSPORT

Type: Ground Transport

Size: 4

Damage Modifier: -3

SP/STA: 150/300

Crew: 3

Passengers: 8

Cargo: 10,000 kg, 34 cubic meters

Power: Type 3 Sathar parabattery

SEU: 2,000

Max. Range: est. 1,000 km

Movement; Wheels/Track

Top/Cruise Speeds: 105/75 kph (175/125 m/t)

Turn Speed: 60 m/t Accel./Decel.: 40/30 m/t

Weapons: 1 Small Open Turrets each with 1 small

weapon

Defenses: None

Equipment: Sathar short-range radio (50 km)

HANDLING STRUCTURAL DAMAGE

Structure points for vehicles have been a part of the Star Frontiers game since the beginning. Pages 24 and 25 of the Alpha Dawn Expanded Game provide information for calculating the structure points for things from "light vehicles" to "armored vehicles," but damage is not handled the same way as fighting a robot.

For example, an automatic rifle will do 5 structure points per shot, a gyrojet pistol 10 points, but a needler will not do any damage. Yet, these structure points are not incorporate in the normal vehicle combat rules where you have to roll on the Vehicle Damage Table or the Control Table.

In many ways, the Star Frontiers system shows how a vehicle can become disabled long before it is destroyed. But how do you know when a vehicle is totally destroyed?

An optional rule changes the "No Effect" result in the Alpha Dawn vehicle damage table to direct damage to the structure of a vehicle.

The number of structural points (SP) for each vehicle is listed in the Vehicle Size, Structure/STA Point Table. When the vehicle is reduced to zero structural points it is so badly damaged that it is no longer fit for service.

For those who do not want to use structure points, they can be converted into Stamina (STA) points. Generally, one structure point equals two Stamina points. Furthermore, for the purposes of this guide, 500 Stamina points or 250 structure points equals 1 Knight Hawks starship hull point.

For example, a civilian ground cycle is considered a size 1 vehicle. It could have a maximum of 100 structure points or 200 STA. If a laser pistol shot penetrates the side of the cycle's engine compartment, it may hit a sensitive area causing the vehicle to stop, but it may also damage the structure of the vehicle.

The structure takes damage when the "No Effect" result is rolled on the vehicle damage table.

Note: if a character is trying to break into a vehicle, such as blowing open a door on an armored vehicle, refer to the Structural Damage Capacity Table in the Expanded Game rulebook. This damage may affect the vehicle's overall integrity, but breaking into a locked glove compartment, for example, might not harm the rest of the vehicle.

OPTION: STRUCTURE AND VEHICLE DAMAGE

Both special damage and structural damage to vehicles are cumulative. So any hit that requires any kind of roll on the Vehicle Damage Table—not just the "No Effects" result—causes structural/stamina point damage to a vehicle. This technique offers a little more realistic simulation of how combat rips apart a vehicle while causing malfunc-

DAMAGE MODIFIERS

Non-civilian vehicles may have damage modifiers—which Larry Moore called "Coats of Protection" in his article. This damage modifier is applied to any roll on the Vehicle Damage and Loss of Control tables in the Expanded Game rule-

For example, the descripton for the Ravager in "The War Machine" says that if attacked by gunfire or explosives, use the Vehicle Damage Table and add 2 to the dice roll. If it is struck by a recoilless rifle shot for 12d10 damage, you would roll on the Vehicle Damage Table and add +14 to the result (+2 being a Ravager and +12 from the recoilless rifle shell).

The damage modifier would also affect the roll on the Vehicle Damage Table. If the number is positive, you would add that to the result, which increases the chances of an incapacitating hit.

If the damage modifier is a negative number, you subtract it from the roll on the damage table, which certainly lessens the chances of getting a "Roll and Burn" result!

VEHICLE SIZE, STRUCTURE, AND STAMINA POINT TABLE

SIZE	SP	STA	EXAMPLES
0	05-25	10-50	Bicycles, mopeds, 1-person transport pods, go-karts.
1	25-75	50-150	2 person cycles, ATVs, "golf" carts.
2	50-150	100-300	2-4 person small cars
3	100-200	200-400	Mid-size cars (standard Star Frontiers ground cars and hover cars)
4	150-250	300-500	Small cargo trucks or vans. (standard Star Frontiers transport)
5	200-300	400-600	Large cargo haulers, tractor trailers.
6	250+	500+	Truly large vehicles but excludes mass transports such as monorails, ocean freighters, etc.

cybodragons.

ARMYWORM TROOP TRANSPORT

The Armyworm is a more robust version of the Treadworm transport. It is a track-mobile with a pivot linkage at the frontend so it can deal with hilly terrain better. The vehicle can ford rivers up to two meters deep.

It is the sathar's general transport vehicle for troops, In addition to the crew, it can carry up to 28 Sathar troops and/or combat sathar-sized robots. Or it can be configured to carry 14 wounded on stretchers. If used for carrying strictly cargo, it can transport 10,000 kilograms in 30 cubic meters of space.

With a simple start-and-go system, it does not have any kind of security locks.

The Armyworm has two pintle mounts for heavy weapons. One is in front, just to the right of the driver's position, which can cover the right side of the vehicle and the forward 45-degree arc. The second mount is just behind the driver and the gunner can cover the entire left side and the front 45-degree arc.

Usually Armyworms mount the types of weapons for both mounts, typically either heavy lasers or sonic devastators, powered by an onboard generator with a 100 SEU powerpack as a backup battery. If machine guns are mounted, will carry ammunition for 10 bursts along with two spare bullet belts.

An open air vehicle, the Sathar troops or

ARMYWORM

TROOP TRANSPORT

Type: Tread-mobile

Size: 4

Damage Modifier: -5 SP/STA: 200/400

Crew: 3

Passengers: 28 troops/combat robots

Cargo: 1000 kg, 3 cubic meters

Power: Type 3 Sathar parabattery

SEU: 2,000

Max. Range: est. 1,000 km

Movement; Wheels/Track

Top/Cruise Speeds: 75/60 kph (125/100 m/t)

Turn Speed: 100 m/t Accel./Decel.: 40/30 m/t

Weapons: 2 Small Open Turrets each with 1 heavy

weapon

Defenses: None

Equipment: Sathar short-range radio (50 km), 1

Searchlight

robots can also fire out of the sides, but only two can do so per turn.

WARTIME UPGRADE

By the time of the Second Sathar War, the Armyworm received several improvements including a vehicle inertia screen. It is powered off of a dedicated 500 SEU battery. It was also made to be more buoyant and could cross fairly calm lakes and seas at a half movement rate.

TAPEWORM

TAPEWORM

ARMORED PERSONNEL CARRIERS

Type: Armored vehicle

Size: 4

SP/STA: 250/500

Crew: 4

Passengers: 12 troops and combat robots

Cargo: 2,500 kg, 7.5 cubic meters

Power: 1 Sathar battery, type 4

SEU: 4,000

Max. Range: est. 1,000 kilometers

Weapons: 4 hard points; 1 heavy Laser, 250 SEU

pack; machine gun, 10 bursts.

Defenses: albedo screen, inertia screen, both screens cannot be up at the same time. They operate off of the same 1,000 SEU powerpack. Vehicle provides up to 10 rad/hour protection from radiation. It has 25 points of armor, which must be burned through before the vehicle takes damage.

Equipment: A deluxe cabin filtration system that filters out most toxins and radioactive particles; 5 sathar medkits, 2 searchlights (front an rear turret), spare ammunition and powerpacks.

SAPC-1H HOVER

Damage Modifier: -4

Movement: Hover

Top/Cruise Speeds: 150/105 kph (250/175 m/t)

Turn Speed: 70 m/t Accel./Decel.: 60/40 m/t

SAPC-2W WHEELED

Damage Modifier: -6

Movement: Wheeled

Top/Cruise Speeds: 105/75 kph (175/125 m/t)

Turn Speed: 70 m/t Accel./Decel.: 60/40 m/t

SAPC-3T TREADED

Damage Modifier: -8

Movement: Top/Cruise Speeds: 105/75 kph

(175/125 m/t) Turn Speed: 70 m/t Accel./Decel.: 60/40 m/t

ARMORED PERSONNEL CARRIERS

The "Tapeworm" is the name for three related armored personnel carriers that share much of the same architecture, but have different propulsion systems. The SAPC-2H is a normal hovercraft. The SAPC-2W is a wheeled version of the Tapeworm, while the SAPC-3T is a tread-mobile.

Sathar Clan Y has variants that the Landfleet has nicknamed the "Roach Motels" and they are known as the SAPC-2HY, SAPC-2WY, and the SAPC-2TY. These armored personnel carriers can transport up to 12 Sathar soldiers but also transport 12 Cockroach Combat Robots.

ARROWWORM ROCKET SLED

The Arrowworm is a rocket-powered variable hovercraft resembling a 4-by-4 meter metal platform with a transparent dome and a rear hatch. Of a modular construction, the rocket sled is built to allow for easy assembly/disassembly and compact storage.

The front of the vehicle has a heavy laser in a swivel mount. A pair of mechanical arms is

ARROWWORM

ROCKET SLED

Type: submersible/variable hovercraft

Size: 2

Damage Modifier: +2

SP/STA: 150/300

Crew/Passengers: 2 + 2 robots

Cargo: 20 kilograms, 5 cubic meters

Power: Sathar powerpack

SEU: 500

Max. Range: est. 500 kilometers maximum; 25

kiloliters of chemical rocket fuel

Movement: Variable

Hover:

Top/Cruise Speeds: 150 kph/90 kph (250/150 m/t)

Turn Speed: 80 m/t Accel./Decel.: 100/40 m/t Max. Altitude: est. 1,000 meters

Submersible:

Top/Cruise Speeds: 60 kph/24 kph (100/40 m/t)

Turn Speed: 40 m/t Accel./Decel.: 40/20 m/t

Weapons: 1 hardpoint; 1 forward, swivel-mounted sathar heavy laser (a 45-degree arc of fire in front), powered off of the powerpack.

Defenses: None

Equipment: 1 radiophone; toxyrad-like gauge, sensors include sonar (50 meters), and infrared (10 meters).

attached to the corners of the platform, just above the rocket motors. The arms allow the sathar pilots to grab and hold onto objects or animals/characters outside of the craft.

Inside, the pilots lay side-by-side along two small robots. The robots—"Spider I" personal robots—are mounted on the middle sides of the platform.

Used primarily by sathar scouts, the rocket sled's steering controls attach to the Sathar's tails. All security and computer locks on the vehicle are level three.

The Arrowworm is airtight and waterproof. It can not only fly, but also operate submerged for short periods of time. It has an air supply for five hours. As a variable hovercraft, it can operate at low altitudes, but travels more at hover vehicle speeds. If flying, it can become unstable and crash during stormy weather.

WARTIME UPGRADE

By the time of the Second Sathar War, the Arrowworm was given several upgrades including infrared bafflers, to help mask it from enemy sensors. Other equipment included a radar jammer and a holographic projector with a camera system so it could blend into the terrain.

HOOKWORM HOVERBIKE

The Hookworm hoverbike is a sleek oval shape with a bowl depression for 1-2 sathar

HOOKWORM

HOVERBIKE

Type: Variable hovercycle

Size: 1

Damage Modifier: +2

SP/STA: 75/150

Crew/Passengers: 1 + 1

Cargo: 100 kg, 1 cubic meter

Power: Sathar Powerpack

SEU: 800

Max. Range: est. 1,000 kilometers maximum

Top/Cruise Speeds: 150 kph/90 kph (250 meters per turn/150 meters per turn)

Turn Speed: 80 meters per turn Accel./Decel.: 100/40 meters per turn Max. Altitude: est. 1,000 meters

Weapons:1 swivel mount for forward-facing sathar

rifle (45-degree arc)

Defenses: None

Equipment: 1 Sathar chronocom, searchlight

to ride it (only 1 rider if a member of the core four). This vehicle is a simple start-and-go design, without any security lock mechanisms.

Note: Not only do Frontier characters suffer the -20 percent penalty for operating alien equipment but in the case of the "bikes" there is an additional -5 percent penalty due to the uncomfortable fit of the "bucket seat" for all but a dralasite.

WARTIME UPGRADE

By the time of the Second Sathar War, the Hookworms were outfitted with Inertia and Albedo screens, powered by a 100 SEU powerpack; only one screen could be activated at a time. It was also given a radar unit (1 km) and an infrared scanner (50 meters).

RINGWORM

RINGWORM

STAFF CAR

Type: Variable hovercar

Size: 3

Damage Modifier: -4

SP/STA: 175/350

Crew/Passengers: 6

Cargo: 150 kilograms, 1 cubic meter

Power: Sathar powerpack

SEU:1,000

Max. Range: est. 1,000 kilometers maximum

Movement: Hover

Top/Cruise Speeds: 150kph/90 kph (250 meters

per turn/150 meters per turn) Turn Speed: 80 meters per turn Accel./Decel.: 100/40 meters per turn Max. Altitude: est. 1,000 meters

Weapons: 6 hardpoint; 1 front and 1 rear medium turrets with, each with 360-degree field of fire, a searchlight and 2 small heavy weapons of the same type. Beam weapons have a dedicated 200 SEU powerpack while other weapons have ammunition for 10 combat turns.

Defenses: Armor which provides 115 points of protection before the vehicle may be damaged; 1 albedo Screen, 1 inertia Screen (both screens cannot be activated at the same time, but they run off of the same 200 SEU powerpack); provides protection up to 50 rads of radiation per hour.

Equipment: radiophone (500 km range) and scrambler, searchlight, sathar vehicle computer with bodycomp-like progits, sensors include radar (2 km range), infrared/ultraviolet (100 m range), anti-tampering device (electric shock, 4d10 + stun), level 4 security locks, airtight and deluxe cabin air filtration system with life support for 10 hours.

STAFF CAR

The Ringworm is a saucer-shaped, variable hovercar with four side hatches. It is used by Middle Caste to Upper Caste sathar. It can transport six worms, two of whom are gunners. If it is commandeered by members of the Core Four, it will only fit four characters.

HEARTWORM

CS-1 COMMAND SAUCER

Type: Variable hovertruck

Size: 5

Damage Modifier: -14

SP/STA: 300/600

Crew: 9

Passengers: 9

Cargo: 5,000 kg, 15 cubic meters

Power: 2 sathar batteries, type 4 or sathar type 1

generator and fuel for 10 hours.

SEU: 8000; 500 seu per hour with generator

Max. Range: est. 1,000 kilometers

Movement: Hover

Top/Cruise Speeds: 150kph/90 kph (250 /150 m/t)

Turn Speed: 80 m/t Accel./Decel.: 100/40 m/t Max. Altitude: est. 1,000 meters

Weapons: 12 hardpoints;

Upper deck, right side cupola (180 degree fire right side): 2 machine guns, 20 bursts of ammo each. Upper deck, left side cupola (180 degree fire left side): 2 machine muns, 20 bursts of ammo each. Lower deck, right side cupola (180 degree fire right side): 2 heavy lasers, set at 10d10 each (10+10 SEU), powered off of 1,000 SEU power drum. Lower deck, left side cupola (180 degree fire left side): 2 heavy lasers, set at 10d10 each (10+10

SEU), powered off of 1,000 SEU power drum. 4 rocket launchers on swivel mounts, facing forward (45-degree fire), with auto loader, ROF: 1 per turn, 40 small rockets.

Defenses: EMP shielding, protects against electronic discharge warhead attacks (70%), while allowing the craft to "reboot" if it goes down; Vehicle can operate in total vacuum of space and in very extreme temperatures. Up to 50 rad/ hour protection; Heavy Armor: 300 points of armor, which must be burned through before the vehicle takes damage; Vehicle Ultra Shield, a defensive energy screen will protect against most energy attacks (laser, electrical, sonic, rafflur, maser, and bolt weapons). For every 1 point of damage absorbed, it drains 5 SEU. Operates off of a dedicated 1,000 SEU powerpack.

Equipment: Deluxe Cabin Filtration System, filters out most toxins and radioactive particles; Can run off of internal life support system for ten beings for 20 hours; Computer level 4.

VEHICLE CREWS

The number of crew members encountered with the Treadworm or Armyworm transports depends on its mission. If it is ferrying cargo, it has a crew of two supplemented by a robotic cargo lifter (basically a heavy-duty robot). If the Treadworm is used for supplying attack monsters, at least one of the Sathar crew would have veterinarian training (the equivalent of Medical 3).

TYPICAL TRANSPORT CREW

STR/STA:	40/40			
DEX/RS:	40/40			
INT/LOG:	40/40			
PER/LDR:	40/40			
IM: 4	PS: +2			
RW: 20	MW: 20			
Typical Skills: Laser 1, Melee 1,				

Technician 2.

Defenses: None

Weapons: short sword, 1 laser rifle with 1

powerclip

Equipment: Chronocom.

TYPICAL GUN CREW

STR/STA:	40/40		
DEX/RS:	40/40		
INT/LOG:	40/40		
PER/LDR:	40/50		
IM: 4	PS: +2		
RW: 20	MW: 20		

Laser 2, Melee 2, Thrown Weapons 1, Artillery 2.

Defenses: None

Weapons: short sword, 1 laser rifle with 1 powerclip, 2 grenades

Equipment: Sathar targeting helmet, which provides a heads-up display (HUD) for targeting, ear protection, and a 5 kilometer chronocom. Without the helmet, the sathar would have a -30 percent penalty to-hit with the cannon.

HEARTWORM **CS-1 COMMAND SAUCER**

The "Heartworm" command saucer is a headquarters truck where at least one Upper Caste sathar can be encountered. The command saucer is 10 meters in diameter and 4.5 meters tall, with two decks. It is also a variable hovercraft, so it can fly up to 1,000 meters off the ground.

The upper deck is for the leader, along with any command and control equipment, a small rest cubicle, Upper Caste weapons locker, and side cupolas for Mid-Caste warriors to man heavy weapons. It also has a top emergency hatch and a rear "landing deck" for a "Hookworm" Hoverbike.

The lower deck's crew compliment would normally be six: 1 driver, 2 additional gunners, 1 Mid-Caste Technician, 1 Mid-Caste Medic, 1 lower caste body guard (the equivalent of a NCO). This deck would have a standard weapons locker, sanitation facilities, 4 "hot bunks," more communications and computer equipment, repair kit, medical kit, life support, 1 robot brain (level 5 or 6), 2 security/combat robots, 1 maintenance robot. There is a bottom emergency hatch and three normal exit hatches for the landing legs.

Up to nine others can be crammed into the vehicle, but as noted earlier its life support system can only support 10 beings. On planets with a breathable atmosphere—or even ones with a bit of a taint—its air filtration system will allow it to use the outside air rather than the life support system.

WORMWOOD SAU-1 SMALL AUTOMATIC CANNON

Nicknamed the "Wormwood" by UPF intelligence services, the SAU-1 was first encountered by Frontier forces during the exploration of Volturnus. It is an infantry support/anti-aircraft weapon that is mounted on a lightweight, hover plat-

The gun can be towed into place by another vehicle, but can move around the battlefield on its own. The unit cannot move and fire during the same turn, but can pivot 360-degrees and still fire.

Equipped with a sophisticated fire control system, its base chance to hit is 70. With its automatic shell loading system, it can fire one shell per turn at either aerial or ground based targets. The shell will

WORMWOOD SAU-1

SMALL AUTOMATIC CANNON

Type: Self-Propelled Artillery Unit

Size: 1

Damage Modifier: +2

SP/STA: 60/120

Crew: 2

Movement: Hover

Top/Cruise Speeds: 40 meters per turn/20 meters per turn (24 kph/12 kph)

Turn Speed: 20 meters per turn Accel./Decel.: 20/20 meters per turn

Weapons: Sathar Small Automatic Cannon Range: PB 150/S 300/M600/L 1km/E 2km; ROF: 1, Attack: 70, Damage: 24d10, Blast Radius: 4/6 meters, Ammunition: 40 shells, Defense: Inertia

Defenses: None

cause damage to targets within the primary blast radius. Characters in adjacent squares must make a Stamina check or be stunned for 1-10 turns; robots are never stunned.

The crew members include two driver/ gunners, who are partially visible and receive hard cover if they are fired upon.

It has a level 3 security lock that must be overcome to operate.

WARTIME UPGRADE

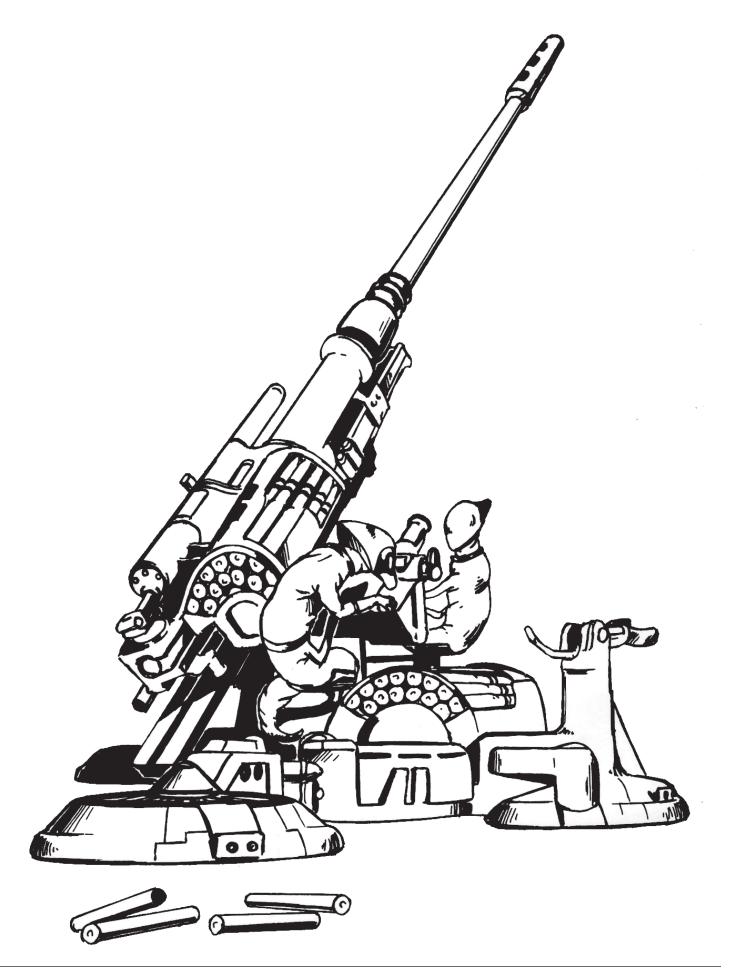
By the time of the Second Sathar War, the Woodworm was given an Inertia and Albedo screens. Both were powered off of the same 500 SEU powerpack, but only one field could be up at a time.

COTTONWOOD **MEDIUM AUTOMATIC CANNON**

The "Cottonwood" is a light-duty infantry support/anti-aircraft weapon that is a step up from the Wormwood artillery unit. It comes in three varieties including a hover unit (the SMAU-2H), a wheeled unit (SMAU-3W), or the tracked unit (SMAU-4T).

The Sathar apparently like to keep their artillery units light and fairly mobile. They can be towed into place by another vehicle, but can move around the battlefield on their own. The unit cannot move and fire during the same turn, but can pivot 360-degrees and still fire.

Equipped with a sophisticated fire control system, its base chance to hit is 70. With its automatic shell loading system, it can fire one shell per turn at either aerial or ground based targets. The shell will



COTTONWOOD

MEDIUM AUTOMATIC CANNON

Type: Self-Propelled Artillery Unit

Size: 2

SP/STA: 75/150

Crew: 2

Passengers: 12 troops and combat robots

Cargo: 2,500 kg, 7.5 cubic meters

Power: 1 Sathar battery, type 4

SEU: 4,000

Max. Range: est. 1,000 kilometers

Weapons: Sathar Medium Automatic Cannon-Range: PB 300 m/S 600 m/M 1,200 m/L 2 km/E 3 km; ROF: 1; Attack: 70; Damage: 30d10; Blast Radius: 5/10 meters; Ammunition: 30 shells; Defense: Inertia.

Defenses: none.

SMAU-2H HOVER

Damage Modifier: +2

Movement: Hover

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t

SMAU-3W WHEELED

Damage Modifier: 0

Movement: Wheeled

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t

SMAU-4T TREADED

Damage Modifier: -2

Movement: Tread

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t

cause damage to targets within the primary blast radius. Characters in secondary blast radius must make a Stamina check or be stunned for 1-10 turns; robots are never stunned.

The crew members include two driver/ gunners, who are partially visible and receive hard cover if they are fired upon.

It has a level 3 security lock that must be overcome to operate.

WARTIME UPGRADE

By the time of the Second Sathar War, the Cottonwood artillery units were given Inertia and an Albedo screens that were powered off of the same 500 SEU powerpack. Only one field could be up at a time.

SLAUGHTERWOOD LARGE AUTOMATIC CANNON

With the firepower and range that makes it better than the Frontier's large cannons, the Slaughterwood is a deadly infantry support/anti-aircraft artillery unit. It comes in three varieties including a hover unit (the SLAU-5H), a wheeled unit (SLAU-6W), or the tracked unit (SLAU-

Like its smaller cousins, the Slaughterwood is usually towed into place by another vehicle, but can move around the battlefield on its own. The unit cannot move and fire during the same turn, but they can pivot 360-degrees and still fire.

Its base chance to hit is 70. With its automatic shell loading system, it can

SLAUGHTERWOOD

LARGE AUTOMATIC CANNON

Type: Self-Propelled Artillery Unit

Size: 2

SP/STA: 90/180

Crew: 2

Passengers: 12 troops and combat robots

Cargo: 2,500 kg, 7.5 cubic meters

Power: 1 Sathar battery, type 4

SEU: 4.000

Max. Range: est. 1,000 kilometers

Weapons: Sathar Large Automatic Cannon Range: PB 600 m/S 1,200 m/M 2.5 km/L 6 km/E 12 km; ROF: 1; Attack: 70; Damage: 30d10 x 10; Blast Radius: 5/10 meters; Ammunition: 20 shells;

Defense: Inertia

Defenses: none.

SLAU-5H HOVER

Damage Modifier: +2

Movement: Hover

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t

SLAU-6W WHEELED

Damage Modifier: 0

Movement: Wheeled

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t

SLAU-7T TREADED

Damage Modifier: -2

Movement: Tread

Top/Cruise Speeds: 50/25 m/t

Turn Speed: 25 m/t Accel./Decel.: 25/25 m/t fire one shell per turn at either aerial or ground based targets. The shell will cause damage to targets within the primary blast radius. Characters in the secondary blast radius must make a Stamina check or be stunned for 1-10 turns; robots are never stunned.

The crew members include two driver/ gunners, who are partially visible and receive hard cover if they are fired upon. It has a level 3 security lock that must be overcome to operate.

WARTIME UPGRADE

By the time of the Second Sathar War, the Slaughterwood artillery units were given Inertia and an Albedo screens that were powered off of the same 500 SEU powerpack. Only one field could be up at a time.

SCREWWORM VTOL TROOP TRANSPORT

The Screwworm is the largest known Sathar VTOL transport. This heavy-lift

SCREWWORM

VTOL TROOP TRANSPORT

Type: VTOL

Size: 5

Damage Modifier: 0

SP/STA: 300/600

Crew: 6

Passengers/Cargo: 80/150 troops or 25,000

kilograms*

Power: 4 Sathar type 4 parabatteries, 1 generator

Max. Range: est. 2,000 kilometers maximum

Movement: Flight

Top/Cruise Speeds: 300 kph/250 kph

Turn Speed: —

Accel./Decel.: 75/150 meters per turn Max. Altitude: est. 25-30 kilometers

Weapons: 4 hardpoints; Forward nose turret (180 degree front), 2 heavy lasers, set at 5d10, powered by 1,000 SEU pack; Right side cupolas (180 degree coverage), 1 machine gun, 20 bursts; Left side cupolas (180 degree coverage), 1 machine gun, 20 bursts

Defenses: Albedo Screen and Inertia Screen, both screens cannot be up at the same time, they share the same 500 SEU powerpack.

Equipment: Radiophone, 2 chaff pods, 3 searchlights (1 forward, 1 right side, 1 left side), Medical gear, Security locks, level 1. Sensors: Radar, 5 km; IR/UV sensors, 100 meters machine has a cargo area that is 12 meters long, 3.2 meters wide and 3 meters tall. It can carry a payload of up to 25,000 kilograms.

The payload can include cargo, or up to two 10-metric-ton vehicles (Treadworms or Armyworms transports, Ringworm staff car, any of the artillery units, etc.) or it can be configured to carry combinations of 80 combat-equipped troops and standard robots. Alternatively, it can transport up to 150 very lightly armed Sathar and robots.

The crew includes a pilot and co-pilot, two side gunners, a front gunner, and a crew chief.

LUGWORM HOVER TRANSPORT

The Lugworm is the largest known Sathar hover transport at 57 meters long, 26

LUGWORM

HOVER TRANSPORT

Type: Hover

Size: 6

Damage Modifier: -15

SP/STA: 400/800

Crew: 31 (4 Middle Caste, 27 Lower Caste)

Robots: est. 20 work robots, 10 combat robots, 1 robot brain

Passengers/Cargo: up to 500 troops/450+ metric

Power: 2 sathar type 3 generators

Max. Range: fuel for an est. 1,400 kilometers
maximum

Movement: Hover

Top/Cruise Speeds: 90/75 kph (150/125 meters

per turn) Turn Speed: 70 m/t Accel./Decel.: 40/80 m/t

Weapons: 18 hardpoints; 2 Kavacha Anti-Missile System Turrets with 360-degree fire; 2 machine guns with explosive ammunition.

Defenses: Albedo Screen and Inertia Screen, both screens cannot be up at the same time, they share the same 1,000 SEU powerpack. The screens use 6 SEU per turn of operation.

Jammers: Radio, IR/UV, White Noise Generator (50 km range)

Equipment: radiophone, 6 searchlights (2 forward, 2 right side, 2 left side, 2 rear), infirmary for 20, weapons lockers, machine shop, security locks, level 3.

Sensors: radar, 25 km; IR/UV sensors, 500 m

meters wide and 16 meters high. It has a central landing deck that can handle two Screwworm VTOLS.

It is deployed from space via a special assault shuttle with a mostly disposable outer shell. It will come in fully loaded and pressurized. Its job is to quickly transport hordes of troops, combat robots, warbots, and attack monsters to the front lines.

With a cargo area of 400 square meters, it can carry the equivalent of three main battle tanks (up to 150 tons total), or ten armored vehicles with 140 troops/combat robots (a total of 131 tons), or eight armored personnel carriers with 140 troops/combat robots (total mass of 115 tons), or up to 500 troops, with 360 troops in the cargo compartment.

In some cases, the Lugworm has been known to carry 140 troops and combat robots along with two Screwworm VTOLs. It will then have a combination of 200 warbots and attack monsters in the cargo area. Also aboard would be several dozen attendants, spare parts, ammunition, plus food and veterinary facilities for the attack monsters.

This craft is capable of crossing rough seas and is fully protected in NBC (nuclear, biological and chemical) warfare environments. It will protect its occupants from up to 50 rad of radiation per hour while all air is specially filtered. However, the Lugworm is completely dependent on operating in some sort of atmosphere that can be filtered.

The Lugworm is armed with Kavacha Anti-Missile System Turrets with 360-degree fire. The Kavacha is a defensive/offensive weapon system. Each turret has two large, Gatling-style medium vehicle machine guns with explosive ammunition.

The guns in both turrets must fire in the same general direction and elevation but have separate chances to hit. This defensive weapon sacrifices long-range for a greater rate of fire and the ability to shoot down rockets and missiles and even artillery shells and dropped bombs. It can fire at other aerial and ground targets during the same turn.

It relies on its own radar sensors in addition to the vehicle it's mounted on. It has a 70 percent chance to hit and destroy an incoming flight of rockets or missiles—a "flight" in this case is de-

KAVACHA ANTI-MISSILE SYSTEM

Skill: P.G.S. Weapons

Cost: N/A

Weight: 100 kilograms

Hard Points: 4 (2 medium vehicle machine guns)

Rate of Fire: 4 bursts (2 from each gun)

Damage: 15d10 + 15d10 per burst

Ammo: 100 bursts per turret (200 rounds/burst)

SEU: N/A

Defense: Inertia

PB: 0-250 meters

Short: 251-300 m

Medium: 301-400 m

Long: NA

Extreme: NA

fined as a grouping of rockets fired from the same source during the same turn. It has a 60 percent chance to destroy a bomb or cluster of bombs (a bunch of bombs dropped at the same time, from the same enemy vehicle), or a 60 percent chance to destroy an incoming artillery shell.

The Kavacha has a base chance of 70 to hit aerial or ground targets and ignores movement rate modifiers.

The Lugworm's armaments can be supplemented by crewmembers armed with man-portable rocket launchers, heavy lasers, or sonic devastators that can be set up on pintle mounts located at strategic points along the outside, upper deck of the hover vehicle.

OTHER CONSIDERATIONS

Typically, a Lugworm is not going to be sent into a dangerous location by itself. It will probably go in a grouping of at least two, protected by flying or ground or seabased warbots and/or light tanks. While it can handle rough seas, anything greater than a category 3 hurricane may cause it to capsize and sink. The vehicle is not waterproof and must operate in an area with some kind of atmosphere.

IN CONCLUSION

Many of the vehicles given above are armed transportation craft with a few scout vehicles, a command vehicle, and artillery units thrown in. Hopefully, this will help fill in some of the holes in the sathar's lineup.

Special Agent Zk'ul'eeK recording:

Stories of "demon worms" or "flying worms" by the survivors of the New Pale occupation during the Sathar War were long dismissed as unbelievable nightmares. The recent discovery of an old Pan-Galactic Corporation agricultural robot and its months of recordings lend new credence to those accounts. The robot in question originally worked the mannakan fields near the corporate farming outpost of Mogkton.

During the occupation, Mogkton became one of the sathar's concentration camps. It was the smallest, but probably the most infamous.

A place of horrors, at Mogkton the sathar experimented on captives to determine how long it would take them to die of starvation, from dehydration, their limits of pain tolerance, heat tolerance, cold tolerance, how long it took a human to strangle to death, and more.

The worms also conducted genetic manipulation on some of the prisoners.

All told, it is estimated that 3,000 to 5,000 New Pale settlers died at the camp. During this time, the planet had been a Pan Galactic controlled agricultural colony, so many of the victims were PGC employees.

When the sathar were finally driven out of Truane's Star, only a dozen captives were liberated from Mogkton. As of this year, only one survivor, a Human male named Ryan Belcher, was still alive and at the Newkar Sanitorium in the Sintra District.

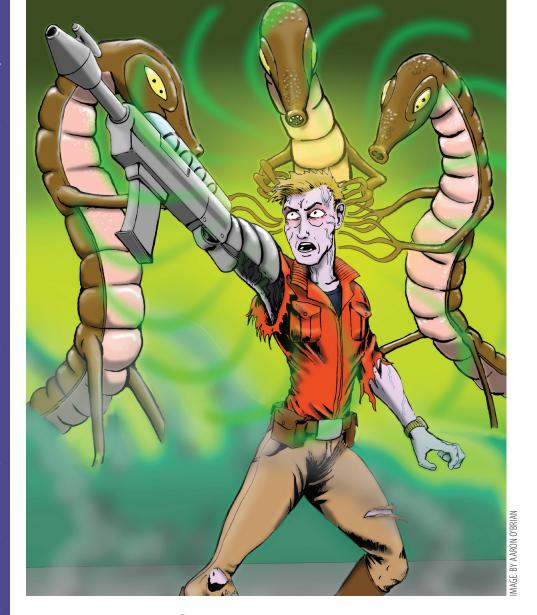
Special Agent Dox Redlum and I interviewed Belcher about his experiences. Belcher was 26 years old when the Sathar first landed on New Pale. He had joined the resistance, but was captured during the last three months of the occupation during a failed attempt to liberate Mogkton.

Belcher was subjected to Sathar genetic manipulation experiments. He apparently had contact with one of the sathar Upper Caste members that prisoners called the Demon

The experiments left Belcher with a number of physical deformities, which have only affected the right side of his body. The man's right arm bulges as if were muscular, covered with hair, it still has skin but also a chitin-like armor. His right hand has become gnarled and clawed, but is useless.

Likewise, the right side of Belcher's body has chitin-like plates, but to walk, he must limp, dragging his useless right leg along. Belcher is also certifiably insane, but Redlum and I talked to him on one of his better days.

Although little is truly known about Sathar society, the Frontier has gleaned glimpses of how it operates through captured equipment or recordings of their attacks. From Belcher's account and the recordings of the ag bot, we believe we've pieced together some important clues about an Upper Caste sathar and its Middle Caste attendants...



KNOW THY ENEMY: ITS NAME IS SATHAR!

BY JOSEPH CABADAS

SATHAR MIDDLE CASTE

The Middle Caste represents about 10-15 percent of a typical clan's population. They are divided between the technical and the warrior orders.

Mid-Caste technicians represent the normal intellectual power of a Sathar Clan, running the day-to-day functions of the clan, factories, and represent their starship crews.

Warrior Order members are the elite fighters, acting as bodyguards to Upper Caste members or typical army or space navy officers. Only one in four middle caste members have hypnotic powers.

While Middle Caste members are better

off than those of the Lower Caste, they are implanted with a bio-hypnotic suicide device. Should a technician find themselves captured and unable to see a reasonable route to escape, it will die instantly as the device cuts off blood flow to the brain.

However, if other friendly Sathar forces are nearby and rescue seems possible, the bio-hypnotic device will allow the technician to live until escape appears impossible.

For members of the Warrior Order, the bio-hypnotic device injects them with the equivalent of an adrenaline rush. These warriors will attack and fight to the death, but if they are incapacitated or unable to fight, the device will instantly kill the warrior.

MID-CASTE TECHNICIAN STR/STA: 40/40

MW: 20

DEX/RS: 40/40 INT/LOG: 45/50 PER/LDR: 45/65 IM: 4 PS: +2

Typical Non-Combat Skills (pick one grouping): Computers or Robotics 1-4, Medical or Environmental 1-4, Technician 1-4.

Typical Weapon Skills: Melee 0-1, Laser 0-1.

Typical Defenses: none Typical Weapons: none

RW: 20

Typical Equipment: sathar chronocom, appropriate tech- or medkit.

Technicians tend to concentrate on their specialty rather than combat. If they expect combat, they will put on defensive suits and take up weapons.

The typical Mid-Caste Warrior, when not expecting combat, will only be lightly armed. The ceremonial short sword has the following statistics: Damage 2d10+2, Modifier +5, Defense Inertia, Mass: 2 kilograms.

MID-CASTE WARRIOR

STR/STA: 45/45 DEX/RS: 45/45 45/45 INT/LOG: PER/LDR: 45/55 IM: 4 PS: +3 RW: 23 MW: 23

Typical Non-Combat Skills: one in ten will have Medical 1-4 or Technician 1-4.

Typical Combat Skills: Laser 2-4, Gyrojet 2-4, Thrown 2-4, Melee 2-4. One in five will have Martial Arts or Demolitions 2-4.

Typical Defenses: None

Typical Weapons: 1 ceremonial short sword, 1 bone

knife

Typical Equipment: sathar chronocom

The bone knife has statistics similar to the knife of the Advanced Game. It is balanced where it can be thrown. The knife is designed to inflict grievous wounds on other Satharoids (Sathar and S'sessu). The bone knife does 1d10+5 points of damage to a Satharoid. Mass: 1 kg (See description on page 32).

SATHAR UPPER CASTE

Representing one to four percent of the Sathar's population—perhaps depending upon which clan one is looking at—the Upper Caste members are the smartest, most educated, and the most valuable.

They are Sathar royalty, the equivalent of princelings or caesars. What they actually call themselves is unknown.

Upper Caste members automatically have the Sathar hypnotic ability. A very few Upper Caste members purportedly have other Mentalist powers. The typical equipment provided below is for Upper Caste members that are encountered when they are not expecting combat.

Upper Caste members often wear a type of ceremonial vest, with openings for both the upper and lower tentacles. While it can act as a 10-point skeinsuit, it is a bio-engineered construct that helps the Sathar with the production of protective slime, especially in dry or poisonous environments—providing a +10 percent Stamina bonus for saving against poison and dose gas attacks. In a hot environment, the vest reduces the Sathar's need for water by 1 liter per 20-hour period.

See the description of a Mid-Caste Warrior for statistics on the ceremonial sword and bone knife.

UPPER-CASTE MEMBER

STR/STA: 40/40 DEX/RS: 40/40 INT/LOG: 50/60 PER/LDR: 45/65 IM: 4 PS: +2 RW: 20 MW: 20

Typical Non-combat Skills: (pick one of the groupings) Computers or Robotics 3-5; Medical or Environmental 2-5; or Psychotherapy or Technician 2-4.

Typical Combat Skills (all): Laser 3-5, Gyrojet 3-4, Melee 4-6, and Thrown 2-4. One in five will have Martial Arts 2-4 or Demolitions 2-4.

Typical Defensive Suit: 10-point ceremonial "vest," acts like a skeinsuit

Typical Defensive Screen: none

Typical Melee Weapons: 1 ceremonial short sword,

Typical Equipment: sathar chronocom

ADVANCED WAR GEAR

Upper Caste members and their elite Mid-Caste guards have the best-of-the-best armor and weapons available. What follows are some examples of their advanced equipment about the time of the First Sathar War—which was simply called the "Great Sathar War" before the second invasion.

SATHAR ADVANCED LASER RIFLE (SALR-3)

Also called a "Type 3" sathar laser rifle, this weapon has a range similar to a Frontier laser rifle but it has better focusing crystals that cause causes 1d10+2 points of damage per SEU. It is powered by a typical sathar powerclip.

XLR-4 BURNING LASER RIFLE

A high-end laser rifle, this weapon has a similar range to a Frontier laser rifle but is far more devastating. Damage: 1d10+5 per SEU (once the target has suffered half-STA damage, it becomes incapacitated). It is powered by a sathar powerclip.

BUZZ SAW

Fitting onto a Sathar's lower tentacles, the Buzz Saw is used to cut through armored opponents and security doors/walls. The weapon will cause massive damage to unarmored opponents. While climbing, it provides the wearer a +20 percent bonus to checks to prevent falling.

Type: powered inertia melee weapon

Damage: 3d10+10 Power Usage: 2 SEU/hit **Power:** two sathar powerclips

SERPENTINE ARMOR

Part powered suit, this is among the best personal armor for Upper Caste members and their Mid-Caste bodyguards. While taking about 5 minutes to don or take off, it provides protection against lasers, inertia, sonic, maser, and rafflur attacks. It will absorb a maximum of 80 points, passing on one-fourth of the damage to the wearer.

Serpentine Armor uses a hydraulic-based exoskeleton that is powered off of the wearer's movements. It uses no energy while also providing limited radiation protection (up to 5 rads per hour). The sathar wearing it has the protection of a built-in gas mask with a two-hour air supply

Its effects include:

- +2 to punching damage
- +1 to IM
- Walking: 12 meters per turn (m/t)
- Running: 24 m/t
- Hiking (hourly): 4 kph
- Crawl rate: 6 m/t
- Rope climbing: 4 m/t, vertical climbing: 2 m/t
- Standing Horizontal Leap: 4 meters
- Running Horizontal Leap: 8 meters

- Standing Vertical Leap: 2 meters
- Running Vertical Leap: 6 meters
- Swimming: no improvement
- Carrying Capacity: +10 kilograms without encumbrance, total carrying capacity increased three-fold.

Serpentine armor is elaborately decorated to give the Upper Caste wearer a ferocious look, which some Frontier survivors have called dragon- or demon-like. The wearer has a +15 percent modifier to leadership checks.

DRAGOON ARMOR

Only one in five Upper Caste members has access to this defensive suit. It is biomechanical. In a sense, it is alive.

Dragoon Armor is powered by a 10-kilogram nutrient gel pack, which provides power for 50 hours. It has an outer hard shell (which is replaceable) that provides 50 points of protection from all most all attacks (laser, electrical, melee, rafflur, bolt, maser, sonic, etc.).

Once that hard shell is burned through, the inner armor provides 80 points of protection against lasers, inertia, sonic, maser, and rafflur attacks. For every four points of damage that the suit takes, three are recorded on the armor and one damages the wearer.

The inner armor is self-repairing. It will heal 2 points of damage each hour, even while in use, but it will use up one hour's worth of nutrients from the gel pack. It takes a Sathar only 1 minute (10 turns) to put on Dragoon Armor.

Its exoskeleton abilities include:

- +4 unching Score
- +2 IM
- Walking 15 m/t
- Running 30 m/t
- Crawling 8 m/t
- Climbing 8 m/t
- Vertical Climbing 4 m/t
- Swimming no improvement (yes, sathar can swim in it)
- Jumping +5 meters
- Carrying capacity: +10 kilograms without encumbrance (the suit does not count against the Sathar's carrying capacity when powered and neither does the gel pack). The wearer can carry 4 times its normal carrying capacity.

Dragoon Armor has vacuum suit capabilities, allowing the wearer to operate in space or in water depths down to 100 meters. It

can filter the air, providing the wearer with immunity to gas weapons (doze, poison, etc.) or the wearer can use its 10-hour air supply. It protects wearer from up to 20 rads of radiation per hour.

Elaborately decorated, the wearer has a +15 percent modifier to Leadership checks.

ULTRA SCREEN

This defensive energy screen will protect against most energy attacks (laser, electrical, sonic, rafflur, maser, and bolt weapons). For every 1 point of damage absorbed, it drains 1 SEU. It is typically powered by a sathar beltpack or backpack.

WING ATTACHMENT

This is a compact, winged, mechanical bioform that is often used in conjunction with Serpentine or Dragoon Armor, though it can be used separately. On planets with a dense enough atmosphere, it permits the sathar to fly at a Fast speed of 80 m/t, though cruise speed is 40 m/t.

It is powered by a nutrient gel pack (another 10 kg), which permits it to function for up to 50 hours at cruise speed. For every hour (or fraction thereof) of use above cruise speed, it reduces the Wing's operating time by 3 hours.

Note: it appears likely that the Sathar created a wing attachment that can be used by its cybodragon attack monsters.

COMMAND CONTROL UNIT (CCU)

Similar to a Frontier bodycomp, this is a wearable and armored computer unit. It includes a cryptography progit to scramble communications and hooks into a 500-kilometer ranged radiophone.

The CCU also has a targeting progit that is linked to the wearer's weapons. It provides the user with a+20 percent modifier for ranged combat and a +10 percent bonus for melee combat.

TYPICAL WAR GEAR

When expecting battle, Mid-Caste warriors will gear up, typically with the following equipment:

- Defense Suit: similar to a 40-point or 50-point skeinsuit.
- Power Screen: Albedo with a Sathar beltpack
- Ranged Weapons: 1 laser rifle, typically with 1 powerclip and 2 spares. One in four will have a disposable rocket launcher.

- Thrown Weapons: 2 grenades
- Melee Weapons: 1 ceremonial short sword, 1 bone knife, 1 sonic knife with powerclip.
- Equipment can include: Magnigoggles, radiophone with scrambler.

Elite Mid-Caste warriors have access to even more advanced equipment because they often guard Upper Caste members. An elite warrior's gear typically includes:

- Defense Suit: Serpentine Armor.
- Power Screen: Albedo with a Sathar beltpack
- Ranged Weapons: 1 Sathar Advanced Laser Rifle (SALAR-3), with 1 powerclip and 2 spares. One disposable rocket launcher.
- Thrown Weapons: 2-4 grenades
- Melee Weapons: 1 ceremonial short sword, 1 bone knife, 1 sonic knife with powerclip.
- Equipment can include: Magnigoggles, 100-km radiophone with scrambler

An Upper Caste member's war gear typically includes:

- Defense Suit: Serpentine or Dragoon Armor
- Power Screen: Ultra Screen with a Sathar power beltpack or backpack.
- Ranged Weapons: 1 XLR-4 Burning Laser Rifle, with 1 powerclip and 2 spares. One disposable rocket launcer.
- Thrown Weapons: 2-4 grenades
- Melee Weapons: Buzz Saw, 1 ceremonial short sword, 1 bone knife, 1 sonic knife with powerclip.
- Equipment can include: Wing Attachment, Command Control Unit with 500-kilometer radiophone and scrambler, and Magnigoggles.

While Frontier military forces have begun deploying various powered armors and weapons that seemingly eclipse the Sathar's top gear, the average citizen encountering a well-armed Upper Caste member and its entourage could find themselves considerably overpowered and outgunned.

It should also be noted that the weapons and equipment listed above was the worms' best during the First Sathar War. They likely have more horrors that can be unleashed on civilian populations.

STALKED BY DEATH

USING THE QUICKDEATH IN STAR FRONTIERS

BY THOMAS VERREAULT

Author's Note: This article was originally published in RPG Review #20 June 2013.

In the Star Frontiers RPG, one of the iconic creatures of the game was the quickdeath. It featured as the "boss" encounter in the bundled module that came with the Alpha Dawn box set. It had features that gave it damage reduction vs. a variety of weapons, multiple means of attack and high stamina to make it a tough encounter. In addition it was a favored attack monster/ bio-construct of the sathar, the game's main villain. The creature was used in key encounters of all three modules of the classic Volturnus campaign.

It was also portrayed as a creature that the sathar would abandon on planets to disrupt the environment. This means it can be found anywhere there has been past sathar involvement from secret outpost to worlds ravaged by the sathar in war. Normally, in a science fiction game, creatures are limited to being found on their home planet. However, the quickdeath, and most other sathar creatures for that matter, are available for use all across the setting.

Star Frontiers, while verging on four decades of age, has failed to use the quickdeath to its best advantage in any of the modules in which it has appeared. What follows is an examination of the creature and suggestions for using the it in creative ways to build tension and terrorize the player characters.

ORIGINS

The "Crash on Volturnus" module explicitly stated that, "the sathar used an advanced form of DNA manipulation to create these hideous beasts from a common type of housecat found throughout the universe." The phrase "common type of housecat found throughout the universe" doesn't make a lot of sense. It doesn't even make much sense if it's "found throughout the galaxy." Even 35 years ago I didn't buy that. The reality of the situation is that as the sathar explored and discovered new worlds, they also discovered a feline like species that they began to bio-engineer.

Of all sathar creatures, the quickdeath is the most changed from its original form.

Things like the slither and the cyboslug are likely very close to their original form when they were first encountered by the sathar. The quickdeath's base body structure is radically different from that of the sathar. The feline-like frame is based on a skeleton while the sathar body is based on a segmented worm that is supported hydrostatically. The sathar have clearly mated features from their own evolutionary tree to this creature which is from an obviously different evolutionary tree.

The first obvious engineered change in the quickdeath is the presence of sathar like tentacles/manipulator limbs growing out its side. These are used to grab prey and bring it to the "digestive maw" while the creature continues to attack with its legs, tail, and mouth. They are actually quite redundant and strike me as something the sathar did to see if it could be done in the process of mastering their science of DNA manipulation.

Secondly, I would judge the four eye stalks to be an engineered change. The fact that the sathar have two pupils per eye and thus four visual feeds entering their brain suggests that they may have changed the creature from two visual feeds to having four, which undoubtedly seemed more natural to them. The radical change, while successful on the surface is the source of the quickdeath's one weakness: it retracts its eyestalks as it attacks to protect them from damage. In the "Crash on Volturnus" module, the player characters were provided straw decoys by the natives for facing the quickdeath. Holding a straw decoy in front of you provided a 50% chance of it being attacked instead in part due to the eve stalk retraction.

Other sathar monsters show considerably less structural change then the quickdeath. This could mean that the quickdeath has been part of their bio-construct experiments the longest, or that the sathar have opted to get new biological assets into the field faster with minimal changes, or both. For these reasons I believe it is one of their first bio-engineered creatures. It's entirely possible that there are other breeds of quickdeath, abandoned prototypes or even original stock felinoid creatures to be encountered.

BEHAVIOR

In "Crash on Volturnus" it was portrayed as a creature that rushed into combat and fought viciously until dead. In "Volturnus Planet of Mystery" it was portrayed as a kept creature in a 900 years old obelisk to guard against intruders. In "Star Spawn of Volturnus" it was portrayed as an attack creature that accompanied sathar soldiers into battle. We are further told in its description that often mated pairs will hunt together.

What we have, intelligence wise, is a highly adaptable creature with a lot of computational ability going on in its brain. The sathar must have enhanced its brain when they changed it to have four visual feeds as that is a lot to process and think about. In addition, adding the tentacles to the sides of the beast required more mental assets. It's apt to work in pairs and pack hunt which suggests a cunning intelligent creature. In the Volturnus campaign, the creature was not given the opportunity to display much cunning or intelligence but it is probably one of the most intelligent creatures that the players could encounter and still not be classified as sapient.

The situation in "Crash on Volturnus" was artificial in that the Ul-mor had corralled a quickdeath and released it at the appointed time for the Rite of Manhood ceremony. It's believable for an aggressive beast to charge obvious opponents when suddenly released. I believe the more natural behavior. when not impacted in an artificial situation. would be intelligent stalking and hunting of prey with attacks sprung from ambush. A mature quickdeath may even have multiple strategies for handling different prey.

THE HUNT

Hunting and stalking is about looking for the optimal moment to strike. Sometimes a predator wants its prey to know it's being hunted to cause panic and exhaustion by not allowing it to rest. This is called endurance hunting. The point is not to actually catch the prey just stay close enough to it that it can't rest or escape and when the creature reaches the point of exhaustion, the predator strikes. Another strategy is ambush: wait until the prey is within the effective



sprint range of the hunter, then attack.

A solitary or mated pair of quickdeath will potentially stalk a party of player characters for days. It will look for ideal terrain and vulnerable targets to spring an ambush. The player characters will become aware of being stalked. Common signs of the presence of the predator would be tracks, skat (feces), territorial marking of trees, a half-eaten carcass, and unexplained noise. A referee should use these signs to build tension in the players over the course of a game session.

Eventually, the quickdeath will make its presence known in a concrete fashion though the players may not get a good look at it. This can be done by having it kill something or someone in the party that is solitary: a vulnerable NPC, a pack animal, or robot associated with the party. It will use its poison dart tail to attack at range from hiding.

If the players opt for a strong defense by having their characters create a fire base with tripwires and traps, the quickdeath may hunt other local prey while maintaining loose contact with the player characters until they are on the move again. It is highly adaptable and will respond intelligently to the actions of the player characters.

Everything should build to a final encounter but does not have to. If the players take enough precautions that any attack by the quickdeath would be suicidal on its part, let the player characters leave the area without ever knowing what was hunting them. Leave the mystery in place so that if they ever return the tension starts high.

COUNTERMEASURES

As stated above, the quickdeath retracts its eyestalks when attacking. The Ul-mor learned to make straw decoys to distract the creature and 50% of the time the quickdeath will mistakenly attack the decoy. Holo-projectors and personal light-shift screens can be used to great effect when combating a quickdeath. Unlike a straw decoy, a hologram is not destroyed when a quickdeath attacks

QUICKDEATH

Type: Large Carnivore

Number: 1 to 2

Move: Very Fast

IM/RS: 8/75 Stamina: 180

Attack: 70

Damage: 6d10 bite, claws

Special Attack: poison dart S10/T3 (RW 60, Range 10/20/30/40/50), attacks extra opponent with maw (10 points)

Special Defense: Immune to needler weapons; 1/2 damage from laser and projectiles, 70% chance will remain unseen until within 120 meters.

Native World: Special. Found in all terrains except mountains

Short: 251-300 m

Medium: 301-400 m

Long: NA

Extreme: NA

it. The creature will not continue to attack empty air because of a hologram while the party kills it, but will turn and target those that have attacked it.

Needler weapons are completely ineffectual against it. Laser and projectile weapons only do half damage. These weapon can still be used but not without wasting ammunition. Lasers will need to be set at their maximum, and automatic weapons will need to be used on burst fire mode. Sonic weapons like the sonic disrupter are the best counter. The sonic disrupter is normally considered to be handicapped because it is a short ranged weapon, but the quickdeath's camouflage ability means that it will almost always be encountered at close range. The exchange rate of 6d10 or 4d10 per shot at point blank or short range is a good alternative to wasting ammo with laser and projectile weapons.

Because the beast is so dangerous, one would not want to remain in melee with it for long. Thus high damage melee weapons are called for. One low tech weapon that could be fashioned by a party that is being hunted is the pole arm. Knives are common enough item that many characters carry. Using a knife and a pole, the characters could fashion a pole arm and use it to good effect, especially if straw decoys or holograms were employed to distract the creature.

If all else fails, run for the mountains. The quickdeath are not found in the mountains.

VARIANT QUICKDEATHS FOR STAR FRONTIERS

BY TOM STEPHENS AND TOM VERREAULT

The venerable quickdeath has been around as long as Star Frontiers. A tough ambush predator that, if played right, can chew up a party of player characters. Don't let your experiences in the Volturnus campaign fool you, this cat is smart, adaptable, and tough; just see this issue's article, "Stalked by Death". However, now that the original quickdeath has been reviewed with strategies for the game referee and the player for handling this creature from either side of the gaming table, it's time to change the game with variant quick-

THE SNOW DEATH

deaths.

The snow death is covered in fur that contains chromatophores that give it an incredible ability to hide and blend into the environment. It gives up its partial immunity to lasers in favor of the enhanced camouflage ability and fur to survive the cold. It has been engineered with enhanced anti-freeze qualities to its blood, allowing it to continue to function in the cold when other creatures would hunker down and wait it out. The tentacles along its side are gone and as well as the eye stalks. Instead it has four eyes with nictating membranes and enhanced sense of smell. This allows the snow death to continue to hunt and stalk even in blizzard conditions.

THE SNOW DEATH

Type: Large Carnivore

Number: 1 to 2

Move: Fast

IM/RS: 8/75

Stamina: 200

Attack: 70

Damage: 6d10 bite, claws

Special Attack: poison dart S10/T3 (RW 60, Range 10/20/30/40/50), attacks extra opponent with maw (10 points)

Special Defense: Immune to needler weapons; 1/2 damage from projectiles, 80% chance will remain unseen until within 100 meters

Native World: Special—employed in cold and snowy terrain

THE TITAN DEATH

The titan quickdeath is just the quickdeath writ large. They are bigger, slower and a damage sponge. All other special abilities and rules apply.

THE TITAN DEATH

Type: Giant Carnivore

Number: 1

Move: Medium

IM/RS: 7/65

Stamina: 300

Attack: 65

Damage: 8d10 bite, 8d10 claws

Special Attack: poison dart S10/T3 (RW 60, Range 20/30/40/50/60), attacks extra opponent with maw (20 points)

Special Defense: Immune to needler weapons; ½ damage from laser and projectiles, 50% chance will remain unseen until within 120

Native World: Special: found in all terrains except mountains

LESSER QUCKDEATH

The lesser quickdeath is a smaller version of the full-size quickdeaths which were originally released on Pale during the Sathar War and encountered on Volturnus. Where the full-sized quickdeath is about 5m long, the lesser quickdeaths are only about 3m in length. While individually smaller and less powerful, the lesser quickdeaths hunt in packs of 3-4 creatures instead of the solitary or breeding pair nature of the full-sized creatures.

While not as fast as the full-sized version (max speed is only 72 kph instead of 100 kph), they otherwise resemble their larger ancestors. Its great legs resemble those of a jaguar. They maintain the claws on their legs, keeping them razor sharp. These claws are used to attack prey and for climbing. Three sets of smaller, tentacle-like limbs which end in suction cups grow from the quickdeath's sides. These limbs are used to catch unwary prey and stuff the victims into the quickdeath's digestive maw. Any creature in the maw takes 10 points of damage until it frees itself (as if breaking free from a hold).

The quickdeath has a long, flexible neck that ends in a snout and large mouth. It has four eyes which are mounted on retractable stalks near the top of its head. The creature's brain is located at the base of its neck. When the quickdeath strikes, it retracts its eye stalks making it nearly blind. With a successful attack, there is a 50% chance it will actually strike something other than its intended target if that object is roughly the same size as the target and within 2 meters of the target's position.

The quickdeath also has a long, whiplike tail that can fling a poisonous dart once every four hours. It typically uses this dart as it first engages in melee to strike a secondary, more distant target

The quickdeath's hide is covered by a moist, reflective armor provides excellent camouflage making it nearly invisible until it approaches within 100 meters. Ouickdeaths are constantly on the move, seeking to appease their hearty appetites.

LESSER QUCKDEATH

Type: Medium Carnivore

Number: 3-4

Move: Very Fast (120 m/turn) (normal quickdeath is up to 166 m/turn)

IM/RS: 8/75

Stamina: 100

Attack: 60

Damage: 4d10 bite, claws

Special Attack: poison dart S10/T3 (RW 60, Range 10/20/30/40/50), attacks extra opponent with maw (10 points)

Special Defense: Immune to needler weapons; ½ damage from laser and projectiles, 70% chance will remain unseen until within 120

Native World: Sathar attack monster bred on Pale—all terrains

Author's Note: The Lesser Quickdeath originally appeared on the Expanding Frontier blog.

EPISODE # 18.0: "SUICIDE RUN"



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THE SCUGLO

BY BRIAN PHONGLUANGTHAM

The scuglo are a parasitic insect that can be found in the remote grasslands of Hakosoar in the Scree Fron system. They live in colonies of about 100 to a couple thousand. Although not confirmed, it is rumored that scuglo colonies have infected hosts on other Frontier planets as well.

PHYSICAL DESCRIPTION

Mature scuglo have a thin, arrow-shaped head measuring about 8mm-1cm with a slight opening at the tip where their razor-sharp antennae protrude. Inside of the adult scuglo's head are two egg sacks and multiple chambers that contain an undetermined chemical solution. Scuglo have 4 powerful, double-jointed legs with feet that can adhere instantly to almost any type of surface.

Scuglo do not have eyes and it is unknown if they have a sense of smell. Full-grown, mature scuglo do not have a mouth. Scuglo consume all they need in their lifetime during their infant stage within their host. Scuglo navigate their surroundings by vibrating their antennae against the hard edges of their exo-skeleton, creating a chirping sound. It uses its 8 ears (2 on each leg) for ultrasonic ranging. It is believed that a scuglo colony shares a "hive mind" as they appear to be highly organized with no sense of individuality.

HOST INFECTION AND LIFECYCLE

Host infection happens when an unfortunate creature stumbles upon a colony. There

will be an audible chirping sound, followed by scuglo leaping from surrounding vegetation and attaching themselves to the host. The scuglo will then bore their sharp heads into the host. At this time, within the scuglo's head, it will release a chemical solution that when mixing with enzymes already present inside the head, causes a violent reaction. The scuglo's head will burst inside the host, triggering their eggs to hatch and release inside the host.

Once the infant scuglo (average length 0.3mm) are released, they spread out quickly and evenly throughout the host's body just below the skin. From there, the infant scuglo begin feeding on the host's adipose tissue.

The scuglo grow at a rate determined by several factors: size and species of host, body fat percentage, and the amount of scuglo inside host; basically their growth rate is determined by how much food is readily available. Once the scuglo are at full size for their infant stage (around 3 mm), they start congregating at various parts of the host's body. Large blisters will form in these areas on the host - who will feel them crawling around under their skin. Once the scuglo are ready, they will exit their host by breaking through these blisters. After exiting, the colony will scurry off in separate directions to search for a home.

Once a suitable home is found, the scuglo colony will regroup at their new home. The colony will spend an undetermined time mating and hibernating until a new host happens upon them.

HOST TREATMENT

If a single scuglo inside the host body is forcibly removed, the rest of the colony will attack the host (further evidence of the hive mind) causing excruciating pain. Doctors have found it better just to sedate the patient and "let nature run its course."

MISCELLANEOUS

While large corpulent animals such as land whales are ideal, Humans and Yazirians are susceptible to scuglo infection. Infection can be avoided if the potential host recognizes the Scuglo's chirping noise (Int check) and is able to move out of the area in time (RS check). The Scuglo's sharp head cannot penetrate the hard carapace of a Vrusk and Dralasite simply can absorb them as food when they attach. Scuglo also cannot pierce skiensuits or inertia screens.

While the colony is inside the host, the host will have reduced mental and physical abilities. After the colony exits, it is normal for the host to feel nauseous and fatigued for a short period of time. Amazingly, the host suffers no long term physical damage from the infection, but there have been many documented cases of lasting psychological trauma.

CONTROVERSY

There is much debate within the scientific community on whether or not a creature whose head explodes could possibly evolve naturally. Some theorize that the scuglo are a genetically engineered creation of the Sathar. Reasons why the Sathar would create a creature like this are anybody's guess.

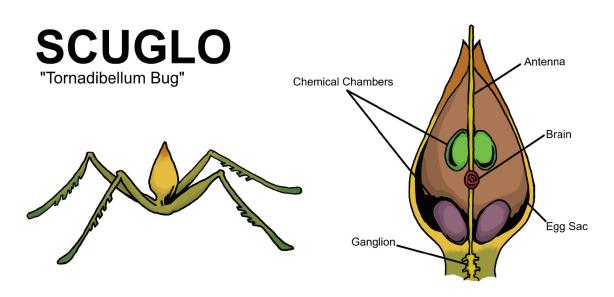


IMAGE BY BRIAN PHONGLUANGTHAM

WHITEHEADED **TREEBOUNCER**

BY ERIC WINSOR

All these many months confined to Hakosoar due to the attacks by the worms on the Frontier put Dwain, Tik, and I behind on many commitments and promises to colleagues across the Frontier. Fortunately, the space lanes are open again and we headed straight off to Minotaur. We took the route along the edge of the vast expanse passing through Lynchpin daring the long jumps to make the trip in eight weeks. Upon re-entering normal space and decelerating into the system, Dwain and I caught up on local events in the holocasts.

MINOTAUR SAVED THE FRONTIER

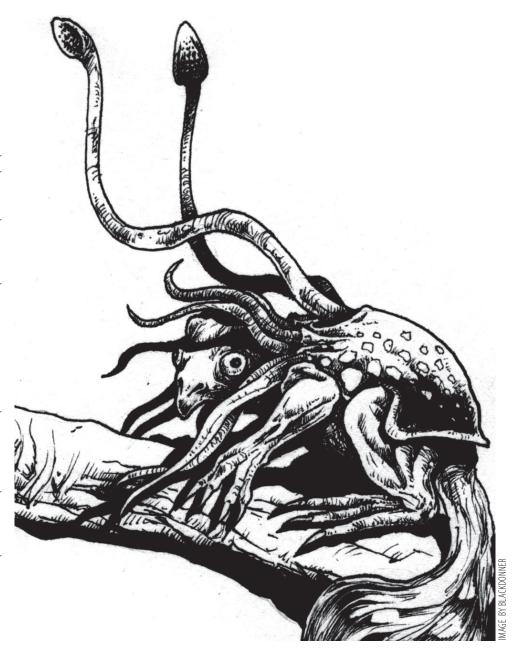
Orbiting Theseus we were witness to the battle scars and reconstruction of the fortified space station orbiting Minotaur. Stopping the worm fleet in Theseus is properly credited to the valiant efforts of the heroes of Minotaur Station.

Admiral Ambrosia will be studied for many years in the UPF Space Fleet Academy for his tactics and mastery of orbital mechanics. His secret net of seeker missiles orbiting Ares deorbited the three Sathar assault carriers via their successive nuclear blasts, plunging the ships into the crushing depths of Ares' atmosphere. Perhaps never again will a fortified space station be able to claim the victory of stopping a Sathar fleet. Minotaur Station paid a heavy price for the victories by the suicide Sathar fighters orphaned by the destruction of their carriers. The lost crew of Minotaur Station are true heroes.

A RIDDLE IN THE MAZE

Our purpose on Minotaur was to visit Flint Forest and observe the Whiteheaded Treebouncer in its native habitat to try and answer the riddle of its mind tentacles. The Whiteheaded Treebouncer lives only in the Flint Forest on the far side of Minotaur opposite of Maze.

A colleague of ours at the Ninland Zoo brought the first pair of Whiteheaded Treebouncers into captivity at the zoo twenty years ago. The exhibit was a success with the Whiteheaded Treebouncers living healthy next to the habitat of the Redheaded Treebouncers common to many of the canyons of Minotaur. Patrons were intrigued by the two additional longer tentacles of the Whiteheaded Treebouncers. The exhibit drew an above average number of visitors in the zoo.



The Whiteheaded Treebouncers were notable for how much they interacted with each other. The Redheaded Treebouncers are known for their slow movements and solitary nature. The two Whiteheaded Treebouncers constantly moved about their enclosure and frequently interacted by touching each other with their long tentacles.

One day five years ago, a dralasite patron was viewing the Whiteheaded Treebouncers near the closing time of the zoo and took advantage of the absence of other beings at the exhibit to sneak a closer look at the treebouncers by stretching his head into the enclosure. Distracted by the them in front of him, he didn't notice one behind him when it dropped down upon him and stuck its long tentacles to his head.

The incident was monitored on camera by

security and they rushed to the enclosure to apprehend the dralasite but didn't arrive until the very moment when the second treebouncer dropped upon him and grabbed fast with its claws. Security pulled the dralasite out of the enclosure frightening the treebouncer off of the dralasite in the process. The dralasite was arrested and taken to the infirmary for treatment while the police arrived.

The dralasite insisted in his statement that the treebouncer showed him in his mind that it didn't like the staff cracking the suco nuts left in the enclosure for it to eat. This little statement, overlooked by the police as a wisecrack by a dralasite trying to avoid arrest, bothered our colleague Doctor Selena Flores for many months.

Doctor Flores was part of the team that annually observed the Whiteheaded Treebouncers in the wild and had noticed that the treebouncers only ate the nuts still attached to the suco trees. Those that fell to the hard flint ground often cracked and were left untouched by the wild treebouncers.

Because the suco tree in the habitat is not alive, having nuts attached to the tree were an extra task. So the habitat manager had duplicated the wild environment by cracking the nuts placed on the floor of the habitat. The Whiteheaded Treebouncers had begun eating the nuts a few days after their arrival and remained healthy, so the practice remained as standard feeding procedure.

Doctor Flores questioned this for many months and after reviewing many holo recordings of Whiteheaded Treebouncers in the wild, noticed that the wild Treebouncers did not pace about as much and touched less but longer when they did touch. She determined to run an experiment of not cracking the suco nuts and hanging them in the tree rather than laying them on the ground.

A week after starting the experiment, the zoo staff was intrigued to find that the Whiteheaded Treebouncers were acting calmer like the recordings in the wild. They would crawl about their tree seeking the hung nuts and pull them loose with their claws then crack them with their sharp beaks. They took longer to eat

the nuts and spent more time observing their surroundings from a perch. Once or twice a day the two would touch each other with their tentacles and spend an hour or more touching.

The zoo staff began to question what they knew about Whiteheaded Treebouncers and sought out the dralasite from many months ago. Doctor Flores wanted to know how he had learned about Whiteheaded Treebouncers because her team was the only team studying them in the wild and the two at Ninland Zoo were the only ones in captivity. Police reported that the dralasite had arrived on Minotaur to visit Maze on holiday and had come from Groth. When Doctor Flores eventually got into contact with the dralasite, it insisted that it knew nothing about Whiteheaded Treebouncers. The dralasite persisted in asserting that the treebouncer had put its thoughts into its mind when its tentacles touched its head.

A DARING EXPERIMENT

Doctor Flores concluded that the only way to tell if the dralasite was telling the truth was to allow the Whiteheaded Treebouncer to touch her head too. She enlisted the aid of the zoo EMTs and another staff biologist, dressed herself in a skeinsuit, and entered the habitat alone. About an hour went by and the treebouncers did nothing. Whenever she went near them

they wandered away.

She was about to give up when one of the EMTs said, "The dralasite was staring one down face to face when the other dropped on it." So, Doctor Flores got face to face with one of the treebouncers and stared it down for about five minutes. Then the treebouncer reached up and puts its long tentacles to her temples.

Doctor Flores got a rush of sensory information from the treebouncer: smell, perceived temperature, visual reaction to ambient light, and some kind of hunger. Then the treebouncer let go and crawled away up the tree. The EMTs and the staff biologist rushed into the enclosure and pulled Doctor Flores out.

The biologist and EMTs checked Doctor Flores over thoroughly. There were no marks to her head. Her heart rate was elevated, but only from excitement. The treebouncer had done nothing physically to her but touch her. Yet in that instant its sensory information had been shared with her. She sat staring with a big grin on her face as they bombarded her with questions to assure she was unharmed.

When they could find nothing wrong she giggled and said to them that she felt that the treebouncers didn't like the artificial light because it didn't move, the light lacked warmth, and the smell of chlorine bothered them. All seemed to be specific requests of things unnatural about



their habitat.

This was the start of years of controlled experiments with the two Whiteheaded Treebouncers and a select collection of staff volunteers who let the treebouncers touch them. What was initially postulated to be communication now appears to be an open passing of sensory information as it is happening to the treebouncer. Time to time the researchers have been able to piece information together that may be indicative of deliberate control over sensory information passed from the host, but no experiments have been repeatable. Communication through shared sensory experiences appears to be beyond the treebouncer.

Yet the puzzle remains, what are the White-headed Treebouncers doing for hours at a time when they are touching their long tentacles together. This question of whether there is actually sensory communication between the treebouncers is what has brought Dwain, Tik, and I here to study the treebouncers in the wild with Doctor Flores.

Two days after we arrived at the Ninland Zoo, we were flying out to the remote camp in the Flint Forest to observe the Whiteheaded Treebouncers. Because they are only found in the Flint Forest, it is a protected species and no other treebouncers beyond the first two have been removed into captivity. Their population is robust and estimated to be numbered above 100,000.

Doctor Flores and her team began touch studies with the wild treebouncers just prior to the recent sathar incursion and then put the study on hold during the incursion. They restarted the study a few months ago. Dwain, Tik, and I had agreed to participate in the pre-incursion study but were stopped by the travel ban. We felt that honoring our commitment made coming to Minotaur our first priority after the incursion and restoration of travel. We settled in, received training on how to safely approach wild treebouncers, then how to encourage a treebouncer to touch.

Tik claimed first touch by a treebouncer on our third day in the field. He is also the first Vrusk to have every experienced treebounder shared sensory information. I claimed the honor of first Yazirian to share treebouncer sensory information two days later. Dwain worked ten days to get a treebouncer to touch him. He eventually had to endure a twenty-minute-long stare down session with a fat old treebouncer he had cornered by climbing to the top of a saco tree.

We each tracked the treebouncer we had touched—it appears that treebouncers are more likely to touch beings that they have previously touched—so it gets progressively easier to be touched if you stick with the same tree-

bouncer for a long time.

Unfortunately, the experience becomes rather repetitive after a while as each of us found that the treebouncer sensory information that we repeatedly received was perceptions of the surroundings the treebouncer is in. There is not much variation in the Flint Forest. The experiments got boring and seemed to go nowhere.

DWAIN'S WILD IDEAS

Dwain always thinks a little out of the box if not a little impatient and risky. A Yazirian would say that Dwain is the hanger that pokes the goozul. The fact that Tik went along with Dwain's idea to shake things up makes me want to introduce Tik to a goozul.

First thing in the morning of our third week of studies in the wild, Dwain went and got in the face of his treebouncer and got a touch initiated while Tik stood behind him with his holo recorder running. Then Tik, at an agreed upon sign from Dwain, produced a rubber rake and dropped it on Dwain's back.

Immediately, the treebouncer shared the sense of the color yellow, the feeling of tensing muscles under its skin, and then a sudden sense of hot temperature followed by intense fear. The fear was so strong that Dwain himself reacted to the fear by expressing fear himself. Dwain jumped instinctively back and ripped the rubber rake from his back and began jumping up and down on it until he came to his senses. Dwain's treebouncer fled from the base of the tree they were at and took refuge in the branches above.

We reported on a rake that made its way to the JHF as a stowaway in a cage in Frontier Explorer issue 20. Rakes are very dangerous and Dwain hypothesized that the Whiteheaded Treebouncer should be afraid of them as well. He proposed to Tik that the treebouncer would recognize the rake and share a sense of fear, an emotion, not a physical body sense of touch, taste, smell, sight, and hearing as had always been shared in past experiments.

Dwain was right and had elicited the sharing of an emotion, but he had not anticipated that it would cause himself to experience true fear as well. When Dwain elicited another touch from his treebouncer, he received senses of sweet smells, tastes, and cool air on the skin with a hint of an emotion of relief. Dwain had broken the experiment deadlock and the team began devising new experiments to test for emotions and state of being, rather than conceptualizing physical things from the senses shared.

We are heading back to Hakosoar in a few days and Doctor Flores is continuing her treebouncer emotion experiments. So far the team has documented fear, relief, peace, worry, sadness, surprise, and disgust. Doctor Flores has also succeeded in initiating a trained response with three treebouncers where they will touch and share a remembered set of senses and emotion. Each of these are built upon the initial shared sense and emotion response and careful repetition of the cues that elicited the initial shared response.

One of the students on the team has trained her treebouncer to share peace and she can stay in a touch bond with it for thirty-five minutes. I have never seen such a satisfied student interning anywhere else in our field. She gets thirty minutes of peace, writes her report on the experiment, then repeats it again quite adeptly. She must be one of the best students in her program at Maze University.

GM NOTES

The dralasite from Groth is tied into the crime syndicates of Outer Reach. He was sent to Ninland Zoo to confirm a rumor that the Whiteheaded Treebouncer can share senses by touch. The syndicate he associates with had previously been using an imprisoned Ul-Mor to interrogate, torture, and impress thoughts into other prisoners. However, the Ul-Mor was not a willing subject and often had to be beaten or drugged into submission. Eventually the Ul-Mor escaped leaving the syndicate without him as a mind weapon.

When they heard about the Whiteheaded Treebouncer, they hatched the plan to train them to share senses of torture so they could better interrogate and brainwash their prisoners. The discovery that emotions are shared as well and that treebouncers can be trained to share on cue, increases the Whiteheaded Treebouncer potential value to the Outer Reach crime syndicates. Unbeknownst to the authorities of Minotaur, dozens of treebouncers have been captured and smuggled away from the Theseus system.

WHITEHEADED TREEBOUNCER

Type: herbivore Size: small: 1m

Number: 2 - 20

Move: very slow: 10 - 15m/turn

IM/RS: 3/30 Stamina: 15-25

Number 20

Attack: 30

Damage: claws (1d10) or beak (2d10)

Special Attack: none

Special Defense: none

Native World: Minotaur, Theseus

KNOW THY ENEMY:

SATHAR SWARM TACTICS

BY JOSEPH CABADASB

This is an alert issued by Star Law's central offices to all Frontier citizens about a recently observed tactic by sathar ground forces.

During recent encounters with sathar raiders, survivors have reported having to fight their way out of seeming suicidal charges by a large cohort of the worms. Sometimes these cohorts are backed up by robots and or attack monsters.

This type of attack has been called a

Swarm tactics appear to be used by secondary sathar soldiers...

COHORT COMPOSITION

A cohort is a group of about 20 Sathar. Some cohorts may number more while others are less.

In this group, only one has the training to be the cohort leader, with superior training. The remaining "cohort tails" appear to be expendable.

These soldiers are entirely made up of Lower Caste members, which represent more than 80 percent of the worms' population.

The equivalent of a Frontier non-commission officer (NCO), the cohort leader would have the following statistics:

COHORT LEADER		
STR/STA:	40/40	
DEX/RS:	40/40	
INT/LOG:	40/40	
PER/LDR:	40/50	
IM: 4	PS: +2	
RW: 20	MW: 20	
Typical Skills: Laser 2, Gyrojet 1, Melee 2, Martial Arts 1-2, Medical 1-2, and Thrown Weapons 1-2.		
Defense Suit: a 40-point inertia suit (acts like a skeinsuit)		
Defense Screen: none		
Melee Weapons: 1 short sword, 1 sonic knife (20 SEU clip)		
Thrown Weapons: 2 grenades		
Ranged Weapons: 1 laser rifle with 1 powerclip and two spares, 1 disposable rocket launcher		

COHORT TAILS

Cohort tails are the lowest skilled Sathar troops and tend to be poorly equipped. If the cohort leader is killed, the group suffers -10 percent penalties for all skill and ability checks—including attack rolls.

Furthermore, because of their lack of independent thought, if a cohort tail has to roll for initiative—if the leader is stunned or incapacitated—it is done with a -1 modifier, or a -2 modifier if the leader is killed.

COHORT TAILS		
STR/STA:	40/40	
DEX/RS:	40/40	
INT/LOG:	30/30	
PER/LDR:	30/30	
IM: 3	PS: +2	
RW: 20	MW: 20	
Typical Skills: Melee 2, Laser 1.		
Defense: 20 point inertia vest (acts like a skeinsuit)		
Ranged Weapons: only four of the 19 Cohort Tails have a ranged weapon—typically a laser rifle with 1 powerclip and 1 spare clip.		
Thrown Weapons: only four of the 19 Cohort Tails have 2 grenades.		
Melee: 1 knife or 1 polearm or 1 short sword		
Ranged Weapons: 1 laser rifle with 1 powerclip and two spares, 1 disposable rocket launcher		
Equipment: 100-km radio phone with scrambler, medkit, magnigoggles.		

COHORT ATTACKS

The cohort leader and the four others with ranged weapons will provide cover fire while the remaining 15 members of the cohort rush opponents for a swarm attack. If one of the tails or the leader is incapacitated or killed, the nearest cohort member is expected to pick up their rifles and continue fighting.

Cohorts may or may not be supported by combat robots or attack monsters.

Cohort members will never surrender. Only the cohort leader may try to talk to characters if they attempt some sort of communication, but usually this breaks down into a series of taunts by the sathar or even lies.

Lower Caste members do not have the sathar hypnotic ability, but they are implanted with a bio-hypnotic suicide device that is virtually undetectable to Frontier science. For example, if a cohort member is stunned and later awakens to find itself captured, it will instantly die as the suicide device cuts off blood flow to the brain.

SUPPORTING UNITS

Sathar cohorts may be backed up by groups of smaller attack monsters or light-duty combat robots. The most common of these are the Vimyte monsters and the SLAS Robot.

VIMYTE	
Type: omnivore	
Number: 1-10	
Size: small (16-20 kg), 1 meter tall	
Speed: Medium, 20 m/t	
STA: 20	
IM/RS: 5/50	
Attack: 50	
Damage: claws 2d10 or bite 2d10 + poison (S2/D4)	
Special Attack: none	
Special Defense: none	

SATHAR LIGHT ATTACK SUPPORT (SLAS) ROBOT

Type: light combat

STA: 50

Power: type 0 parabattery, 250 SEU

Movement: tracked, 120 m/t (72 kph)

Level: 2

Attack (to-hit): 50%

IM: +5

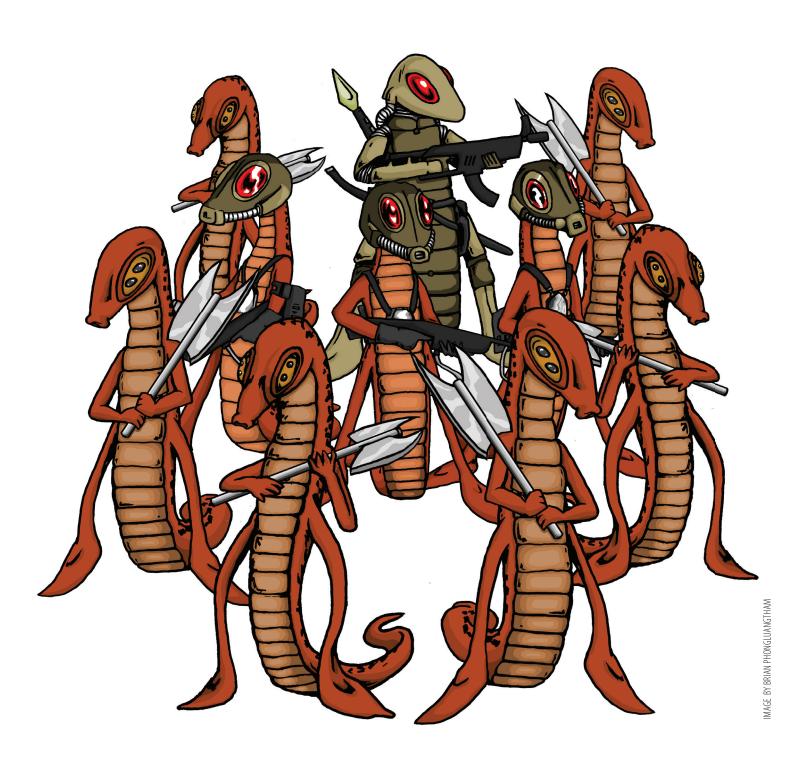
Melee: limbs, 1d10

Ranged: various, usually a laser pistol w/ one 20 SEU clip

Programs: Attack/Defense 2, Computer Link 2, Security Lock 1.

Equipment: 100-km radio phone with scrambler,

medkit, magnigoggles.



The SLAS is a fairly cheap, expendable combat robot that may be used to support Cohorts, either with or without Vimytes. It is used to rush a target and inflict as the maximum amout of damage possible. Many cohorts operate without the SLAS, but those that have them will be equiped with up to ten of them.

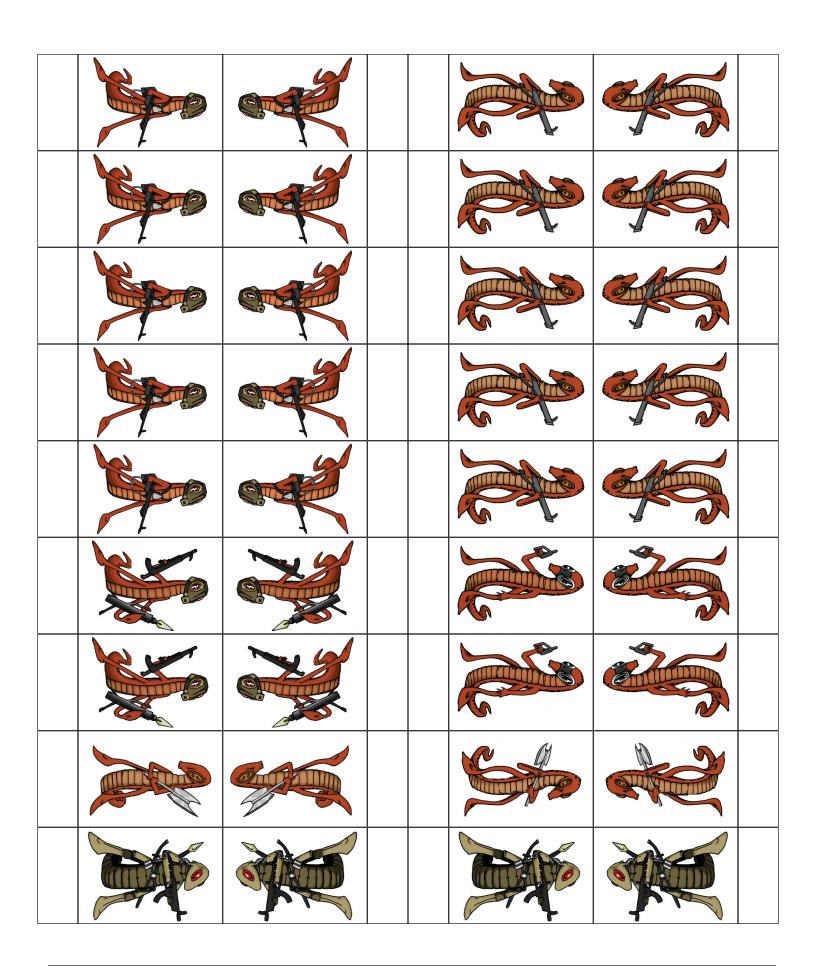
CONCLUSION

...Star Law reminds citizens that should they encounter sathar, they should attempt to flee the area. If escape is impossible, it is recommended that you should fight your way to freedom.

The survivors of the occupations of Truane's Star and Dixon's Star during the

Great Sathar War show that these monstrous beings will use captives as slave laborers or even for cruel biological and genetic experiments!

This report was taken from a Star Law general warning that was first issued to the citizens of the United Planetary Federation in the year 8 FY, shortly before the outbreak of the Blue Plague.





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