Issue 19 Winter 2017

Frontier Explorer

ar Frontiers 35th Anniversary Looking at the Eorna of Old Solving the Star Metal Sickness Volturnus Before the Day of Doom The Dratasite Mubobp

.. compels the soul to look upward ...



FEATURES







THE FRONTIER IN MINIATURE: CYBOTS......28

CONTENTS

Star Frontiers 35 th Anniversary
Star Frontiers Birth Locations
Looking at the Eorna of Old
Solving the Star Metal Sickness
Volturnian Psycrystals9A bit of old eorna tech to sprinkle into your campaign
The Mechanon Revolt and Its Roots in the Battle of Volkos
A look at the motivations behind the Mechanon Revolt
Volturnus Before the Day of Doom
The Dralasite Mubobp
Titan Rising: 2299
The story continues in episode 12
Drones For Star Frontiers
The Frontier in Miniature: Cybots
Dystopian Futures
General Quarters
Lo, The Rings of Saturn
Grimz Guide Comicback cover You never know who is listening.

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FROM THE EDITORS

Welcome back explorers!

It's 2017 and that marks the 35^{th} anniversary since the original publication of Star Frontiers and the 5^{th} year anniversary of the Frontier Explorer. I can't believe we've been at this for nearly five years. It's amazing how time flies.

I've been playing Star Frontiers off and on for 33 of those 35 years. I picked up the game in the spring of 1984 and played it all through junior high and high school. College and grad school was a slow time for me but I jumped back into gaming a bit over a decade ago and discovered the small on-line Star Frontiers community that existed at the time. I've watched it grow slowly over the intervening years with the growth of new websites, and two "authorized" fan magazines including this one.

The Star Frontiers community continues to grow and I feel it has been growing at an increasing rate in the last few years. You are an amazing group of people and I'm excited and often humbled by the sheer creative output that I see. Here's to many more years of wonderful adventures in the Frontier. The lead article in this issue talks a bit more about what's in store for the up-coming year in regards to the magazine and the community in general.

With this issue being the first in the anniversary year, we thought that what better way to remember the origins of the game (besides the throwback cover image) than to return to the place of our first adventures, Volturnus, Planet of Mystery. This issue contains a number of articles focused on that planet including a pair that examine what Volturnus and the Eorna culture may have looked like before the Day of Doom when the Sathar destroyed the planet's civilization.

Before the Volturnus articles, however, we have a debut article by Robert Murphey, a recently active member on the starfrontiers.us community (where he goes by the handle, "ExileInParadise"), providing us with some excellent tables you can roll on to determine where your character was born based on the population densities of the Frontier worlds. The issue also contain a number of articles on robots, miniatures, book reviews, and a short fiction piece. And talking about origins, Jurak Hagna comes across a new creature that may provide a clue to the dralasite homeworld.

As a final note, Bill Logan, who originally started the starfrontiers.us site and the Star Frontiersman magazine, recently announced that FrontierSpace, a new RPG inspired by Star Frontiers and started by members of the community nearly a decade ago, is nearly done and entering a playtest mode. You can expect to see material for that game published here in future issues after the game launches as well as updates along the way.

PRODUCTION CREDITS



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Full Cover Quote:

Astronomy compels the soul to look upward, and leads us from this world to another. - Plato

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So sit back, grab a Yazirian ale, and dive into this issue's wonderful articles. And remember, always keep exploring!

- Tom Stephens Senior Editor

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You may have noticed that we reused the original Star Frontiers boxed set cover as the cover image for this issue. This year marks the 35th anniversary of the publication of Star Frontiers. While we don't officially hit the 35 year mark until July, the month Star Frontiers was originally released, I thought we should get started right away with this first issue of the Frontier Explorer in the new year.

As I did with the 30th anniversary back in 2012, I've created a 35th anniversary logo for this year (seen at right). You can find the details and a 300dpi resolution version of the logo on the Star Frontiers Network Wiki's 35th Anniversary Logo page. Feel free (in fact I encourage you) to use it anywhere you are writing or talking about Star Frontiers throughout the coming year. I also obtained permission from WotC to make a patch based on the logo. Most were sent to those that pre-ordered them but I have a few left and if you're interested in getting one, check out the sidebar on page 23 for details.

While I'd love to do an actual face-to-face Star Frontiers themed con and get us all together, that's just not feasible. However, I am going to try to put together an on-line virtual con later in the year. I need to work out the logistics and dates for that, however. Look for details in the Spring issue. If you'd like to help out, drop me a line (tom@starfrontiers.info) and I'll put you to work. Also, check the Frontier Explorer website as I'll be posting a poll or two about the con.

While there aren't any articles of this type in this issue, I'd really like to run a series of "nostalgia" articles documenting people's introduction and memorable experiences with the game. If you'd like to share how you were introduced to Star Frontiers, any memorable adventures or campaigns you've participated in, after action reports from con games you've run or participated in, or even interesting experiences with the Star Frontiers community, we would love to have them to share in upcoming issues of the magazine. Simply write them up and submit them on the magazine's website or e-mail them to editors@frontierexplorer.org.

Another goal for this year is to revitalize our sister magazine, the Star Frontiersman. I'm looking to turn that magazine into something more akin to the old Dungeon magazine and fill its pages with various adventure scenarios. We started in that direction with issue 25 which was an adventure that filled the entire issue. I'm looking for anything from simple encounter locations, to



one-shot con game type scenarios, to large adventures, to entire campaign arcs. If you have something you'd like to share, whether already existing or a new creation, we'd love to have it to share with the community. Feel free to contact us or simply submit your write-up on the Frontier Explorer or Star Frontiersman websites (they go to the same place).

And if you are wondering where the on-line Star Frontiers community lives, there are a number of places we like to gather. By far the largest community is the Star Frontiers: Alive and Well Facebook group. We're now over 1000 members strong and growing continuously. Next would be the Star Frontiers Google+ community with nearly 500 members. Finally, regular, active, and focused discussions, including a lot of ideas that end up as articles in the magazine, happen on the Star Frontiers Revival site at starfrontiers.us. That site will hopefully be receiving a makeover and upgrade later this year (It's my next project after this issue is done.) If you're not already a member of one of those groups, come join us and lend your voice to the discussions.

Star Frontiers continues to live on and its community continues to grow. Here's to a great 35th anniversary year and many more years to come. Thanks for making the Frontier such a great place in which to live and adventure.

FE



In Star Frontiers Alpha Dawn Basic and Expanded Rules, players are given the choice of which of the four spacefaring races to play: Dralasite, Human, Vrusk, and Yazirian.

But where do these characters come from within the Frontier?

On the Alpha Dawn map and Frontier Worlds table, each of the worlds of the Frontier has an indicator of the racial makeup and population size of that world.

With this racial and population data, players can find their character's birth location, for their chosen race, based on the demographics of the Frontier.

With the addition of Star Frontiers Knight Hawks, there are also other possibilities of space-born characters from stations over the Frontier worlds, deep within the star systems away from specific worlds, or even during a Void Jump.

Roll for the Character's Birth World on the appropriate racial table below:

CORE FOUR PLANET-SIDE BIRTHS

DRALASITE BIRTH WORLDS (Roll d100)

01-14 14%	Triad (Cassidine)			
15-32 18%	Inner Reach (Dramune)			
33-43 11%	Outer Reach (Dramune)			
44-57 14%	Groth (Fromeltar)			
58-74 17%	Terledrom (Fromeltar)			
75-88 14%	Gran Quivera (Prenglar)			
89-99 11%	Pale (Truane's Star)			
00-00 1%	Special: From world race is normally not present on (Hentz, Yast, Rupert's Hole, Laco, Hargut, Ken'zah Kit, Zik-kit, Kawdl-Kar, Kdikit, Morgaine's World, Histran, Hakosoar, Minotaur, Lossend, New Pale, Clarion) or roll on Spacer Birth Locations table below.			

Author's Note: I would like to recognize the many forum contributors who participated in the development of this article. See <u>http://www.starfrontiers.us/node/9587</u>

HUMAN BIRTH WORLDS (Roll d100)				
01-10 10%	Rupert's Hole (Cassidine)			
11-17 7%	Triad (Cassidine)			
18-24 7%	Laco (Dixon's Star)			
25-30 6%	Outer Reach (Dramune)			
31-40 10%	Kdikit (Madderly's Star)			
41-47 7%	Gran Quivera (Prenglar)			
48-54 7%	Morgaine's World (Prenglar)			
55-65 11%	Minotaur (Theseus)			
66-74 9%	Lossend (Timeon)			
75-80 6%	Pale (Truane's Star)			
81-89 9%	New Pale (Truane's Star)			
90-99 10%	Clarion (White Light)			
00-00 1%	Special: From world race is normally not present on (Hentz, Yast, Inner Reach, Groth, Terledrom, Hargut, Ken'zah Kit, Zik-kit, Kawdl-Kar, Histran, Hakosoar), or roll on Spacer Birth Locations table			

below.



VRUSK BIRTH WORLDS (Roll d100)		
01-11 11%	Triad (Cassidine)	
12-20 9%	Outer Reach (Dramune)	
21-34 14%	Terledrom (Fromeltar)	
35-50 16%	Ken'zah Kit (K'aken-Kar)	
51-65 15%	Zik-kit (Kizk'-Kar)	
66-79 14%	Zoot-kit (K'Tsa-Kar)	
80-90 11%	Gran Quivera (Prenglar)	
91-99 9%	Pale (Truane's Star)	
00-00 1%	Special: From world race is normally not present on (Hentz, Yast, Rupert's Hole, Laco, Inner Reach, Groth, Morgaine's World, Histran, Hakosoar, Minotaur, Lossend, New Pale, Clarion), or roll on Spacer Birth Locations table below.	

YAZIRIAN BIRTH WORLDS (Roll d100)

01-15 15%	Hentz (Araks)			
16-29 14%	Yast (Athor)			
30-37 8%	Triad (Cassidine)			
38-45 8%	Outer Reach (Dramune)			
46-59 14%	Hargut (Gruna Garu)			
60-69 10%	Gran Quivera (Prenglar)			
70-79 10%	Histran (Screen Fron)			
80-91 12%	Hakosoar (Scree Fron)			
92-99 8%	Pale (Truane's Star)			
00-00 1%	Special: From world race is normally not present on (Rupert's Hole, Laco, Inner Reach, Groth, Terledrom, Ken'zah Kit, Zik-kit, Kawdl-Kar, Kdikit, Morgaine's World, Minotaur, Lossend, New Pale, Clarion), or roll on Spacer Birth Locations table below.			



COUR FOUR OFF-PLANET BIRTHS

	Spacer Birth Locations					
01-04 4% Araks System Space						
05-07 3%	Athor System Space					
08-14 7%	Cassidine System Space					
15-15 1%	Dixon's Star Space					
16-21 6%	Dramune System Space					
22-27 6%	Fromeltar System Space					
28-31 4%	Gruna Garu System Space					
32-34 3%	K'aken-Kar System Space					
35-37 3%	Kizk'-Kar System Space					
38-39 2%	K'Tsa-Kar System Space					
40-42 3%	Madderly's Star System Space					
43-47 5%	Prenglar System Space					
48-50 3%	Screen Fron System Space					
51-54 4%	Theseus System Space					
55-56 2%	Timeon System Space					
57-61 5%	Truane's Star System Space					
62-65 4%	White Light System Space					
66-68 3%	Fortress Kdikit (Kdikit, Madderly's Star)					
69-71 3%	Fortress Redoubt (Clarion, White Light)					
72-74 3%	Fortress Gollwin (Morgaine's World, Prenglar)					
75-77 3%	Fortress Pale (Pale, Truane's Star)					
78-79 2%	Fortified Station (Minotaur, Theseus)					
80-81 2%	Fortified Station (Ken'zah Kit, K'aken Kar)					
82-83 2%	Fortified Station (Hentz, Araks)					
84-85 2%	Fortified Station (Gran Quivera, Prenglar)					
86 1%	Armed Station (Kawdl-Kit, K'tsa Kar)					
87 1%	Armed Station (Zikit, Kizk'-Kar)					
88 1%	Armed Station (Groth, Fromeltar)					
89 1%	Armed Station (Terledrom, Fromeltar)					
90 1%	Armed Station (New Pale, Truane's Star)					
91 1%	Armed Station (Inner Reach, Dramune)					
92 1%	Armed Station (Outer Reach, Dramune)					
93 1%	Armed Station (Rupert's Hole, Cassidine)					
94 1%	Armed Station (Triad, Cassidine)					
95 1%	Armed Station (Hargut, Gruna Garu)					
96 1%	Armed Station (Lossend, Timeon)					
97-99 3%	Refugee descendent from colonies lost in First Sathar War					
00 1%	Void Jumper					

FE

Campaign Background

LOOKING AT THE EORNA OF OLD

Joseph Cabadas

Although nearly annihilated by the Sathar, the Eorna were once a highly advanced, starfaring civilization.

The Volturnus adventures provide a rollicking entry into the game, introducing the players to a planet of many wonders and dangers that lead to the climactic battle with the Sathar. But what really is the background of the Eorna?

Though the modules stress they are a peaceful race that worships beauty, they had advanced weapons. Just look at the Mechanons' capabilities as a hint that the Eorna's past isn't quite as serene as they present to the players.

Instead of viewing them as a race of space hippie purple dinosaurs who sing "I love you," what follows are some suggestions on how a referee can properly fit them into a campaign. The speculations about this ancient, high technology race are based on an examination of the canon materials in the Volturnus modules along with various fan observations from the Frontier Explorer and Star Frontiersman magazines and the StarFrontiers.us website.

WHAT DID TSR TELL US OF THE EORNA?

A race of fur-covered dinosauroids, the Eorna have mentalist powers – in particular hypnosis – with the ability to make characters forget an encounter. They could shape crystals to make large buildings and were experts at genetic manipulation and cybernetics.

The description of the Eorna sounds remarkably similar to the Sathar.

The referee is encouraged to stress that the Eorna are a peaceful race. However, the descendants of the nearly 150



survivors were able to pull out laser rifles for the Battle of Volturnus when the evil worms returned. Another clue that the ancient Eorna were not so peaceful is the fact they had a planetary defense headquarters – which became the "Mound of the Mechanons" – along with combat robots and warbots.

After the final battle in the last module, an old ship will be found in orbit containing 50,000 Eorna eggs, allowing the Eorna to survive.

For more information about the Eorna, R. Kevin Smoot wrote a story in Star Frontiersman issue 8 detailing how the Eorna could be used as a player character race and their society during the time of the Frontier.

WHAT WERE THE "PRE-DOOM" EORNA LIKE?

We know the Eorna also had interstellar travel before the Sathar destroyed their civilization. After that, we need venture off the canon materials and into fan speculations.

Hypnosis appears to be an innate ability for most Eorna. Maybe it was a way to lure in and capture prey. They don't need to talk to an individual as a Sathar or a player character using hypnotism. After all, the Eorna's hypnotic robots use a device that flashes a rainbow of colors to accomplish this.

Eorna with higher Logic scores probably can learn other Mentalist disciplines, but maybe telepathy is not something that comes easy to them. They created the "neural fungus" (See "Volturnus, Planet of Mystery," p. 28) to try to allow for a direct mind-link between individuals. The old Eorna had perfected this technique, but the information was lost after the Day of Doom, hence the survivors were unable to create a neural fungus that didn't cause extreme pain.

Crystals are basis for Eorna technology, especially the silicon-based lifeforms that the rogue crystals originated from. They could manufacture, shape and form large, artificial crystalline structures using vast processing factories.

If they could shape crystals, they probably also had a technology to soften and shape natural stone.

At the height of the Eorna's civilization, Volturnus was densely populated with a population of more than 10

billion. Most of the populace was located in the cities, which is where the majority of them died on the Day of Doom and the Sathar's subsequent effort to eradicate any survivors.

The Eorna had several nations but had developed a European Union-like super government that was headquartered at Volkos, the capital of one of their most significant countries. This is why the planetary defense installation that became the Mound of the Mechanons was located nearby. Likely, there would be a ruined starport near the capital as well.ⁱ

The Sathar also knew of Volkos' importance and placed its listening post close by.

Since the Sathar seem to be some distance away from the Frontier – one could surmise that because of the long delays between the First and Second Sathar Wars – the Eorna probably didn't encounter them right away. This line of thinking runs counter to the modules that state the evil worms attacked soon after the Eorna launched their first interstellar colonization ships.

Most likely, they had a chance to explore at least a segment of the Frontier and the Rim. They would have had contact with the Humma, Osakar and Ifshnit who were technologically primitive. Perhaps the Eorna played a role in "lifting up" these races with some DNA engineering or at least giving them a technological boost where they were able to survive against later-day Sathar incursions.

One could also see the Eorna having outposts on some of the Rim worlds as well as on New Pale, Laco and possibly elsewhere. These outposts probably weren't large enough to survive independently or were subsequently destroyed by the Sathar. Frontier colonists may have found some of these ruins but didn't know the species that made them until after the Volturnus modules are played.

Other Eorna ruins may still lie undiscovered on Frontier worlds such as Gran Quivera or Morgaine's World (Prenglar).

THE SATHAR-EORNA RELATIONSHIP

The Sathar's genocidal assault on the Eorna along with the idea of "salting the earth" with attack monsters to prevent the "gentle dinosaurs" from ever again achieving space flight doesn't seem to fully match how TSR presented them in other modules.

The Sathar apparently did not slaughter all of the colonists on the planets they invaded during the First Sathar War – or perhaps they didn't get the chance. But later, they tried to subvert Frontier societies with spies or conquering species such as the Mheme to use as a slave race. What follows are some ideas for referees to pick and choose from – or even mix and match concepts.

GO WITH THE MODULES' EXPLANATION

The Eorna are a peaceful race that loves beauty. Soon after they launched their first colonial ships the Sathar conducted a vicious surprise attack that became known as the Day of Doom, left behind various attack monsters and a monitoring station. End of story.

THE SATHAR JUST DON'T LIKE LIZARD-LIKE RACES

See how they also tried to wipe out the Saurians.

CHILD RACES OF THE TETRARCHS

The ancient Tetrarch Societies died out in the Frontier sector more than 10 millennia before the time of the player characters. They left behind ruins on Laco (Dixon's Star) and relocated the S'sessu – an offshoot of the Sathar – to a planet many light years from their homeworld.

What if the Eorna had access to Tetrarch technology and the Ul-Mor, Edestekai and Kurabanda aren't the first time that they uplifted creatures to sentience? Could they have done that with the Sathar as an early experiment and then the "child" rose up and displaced the "father" in an Oedipus complex type of way?ⁱⁱ

Maybe, but it seems a bit unlikely. According to the Dragon magazine story by game designer David "Zeb" Cook, the Sathar and S'sessu were separated by the Tetrarch some 20,000 years **before** the modern Frontier time period.ⁱⁱⁱ If anything, it was the Tetrarch Societies that uplifted the Sathar or at least left behind technology that the worms later used to achieve space travel and a degree of high technology.

THE EORNA AND SATHAR HAD PREVIOUS CONTACT

Maybe one of the Eorna governments had secret dealings with a Sathar clan, unknown to most of the Eorna population, especially the survivors. The Eorna and Sathar may both be species that the Tetrarch's raised up.

The worms grew envious or fearful of the Eorna's mental powers, cybernetic/genetic engineering. In any case, they coveted the Eorna's technology, which led to the Day of Doom.

FIRST THE SATHAR LAUNCHED A BRIEF SURGICAL ATTACK

The first assault by the evil worms came many years before the Day of Doom. This led to the Eorna uniting to defend themselves.

One faction built planetary defenses, but others pressed for low-key solution that did not alert the Sathar to their advances so as to keep the Sathar from ever returning. Over time, the competing Eorna territories engaged in an economic war along with other squabbles that prevented them from implementing a coordinated defense.



When the military faction took space craft and began exploring in the direction of Sathar space, the worms determined they were a threat and took action. The Sathar invaded the Zebulon system and destroyed everything they found in space, resulting in the Day of Doom.

One Eorna faction managed to put the egg ship in orbit around the star. Or, the egg ship was meant for one of the Eorna's colonial efforts and somehow was overlooked by the invaders.

THE SATHAR TRIED TO ENSLAVE THE EORNA

With their propensity to enslave other races, the worms first tried to do this to the furry dinosaurs, but found that the mentalist abilities of the Eorna prevented this. When they resisted, the Sathar gave them death instead.

EORNA INTERFERENCE IN OTHER RACES' DEVELOPMENT

The Eorna's desire to interfere in the development of other races may predate the Day of Doom and be the reason the Sathar attacked with such fury.^{iv}

For example, after Eorna explorers encountered the Humma's homeworld, they found the Humma and the Boon'sheh locked in perpetual warfare -- the endless war. They were both at the level of the early 18th century technology.

Both sides were vicious and fairly evenly matched. Since the Eorna found them to be potential threats in the future, so they introduced a retrovirus to manipulate their DNA and pacify them. The effect was to neuter the Boon'sheh's warlike tendencies but only somewhat tempered the Humma's.

The result was the genocidal war against the Boon'sheh until a Humma king stepped forward to put an end to the conflict.^v

Soon afterward, the Eorna encountered another violent race – the Sathar – and introduced a retrovirus aimed at pacifying them. The treatment backfired and created the brain-damaged lower caste that is good for nothing but being lambs to the slaughter. The Eorna retrovirus infected 80-90 percent of the Sathar's population.

Learning of the Eorna's heinous actions, the worms extracted their vengeance.

The Sathar now breed excessively to find those worthy to be upper and middle caste members. All others are assigned to the lower caste which can rank from those that are semi-functional – the upper lower caste members – to those that just get a laser rifle and are told to go out and do the will of the Great Worm. When one lower caste member falls in battle, another comes along to pick up its laser rifle and ammo and continue the fight.

Volturnus is a planetary version the Island of Doctor Moreau. It was the Eorna's playground for some time to improve various species. Maybe they created the weird creatures like the Land Shark to fulfill some sick Survivor reality TV program.

In helping the Eorna, the UPF are actually helping a bunch of Dr. Josef Mengeles -- at least the elder Eorna who started the Great Mission and were kept in stasis until their clueless descendants unfreeze them to help raise the 50,000 Eorna hatchlings.

EORNA AND THE YERNOIDS

The Yernoids are a semi-intelligent animal introduced in the Volturnus modules. Some are smart enough to be able to use spears. For whatever reason, the Eorna did not try to raise them up. The Yernoids could be a related species, similar to how Humans and chimpanzees are genetically similar. As such, the Eorna didn't deem them to be worthy of their Great Mission.

Since the Day of Doom, the Yernoid population swelled.

Or, maybe a splinter group of Eorna did try to raise up some Yernoids, possibly by breeding with them.

The "Starspawn of Volturnus" module has a suggested additional adventure called "Solving the mystery of Lizard Head Rock." This strange rock formation is shaped like a giant lizard's head. It is at the far east side of the campaign map in the Crystal Mountains.

The Eorna have always wondered about it, what it is, where it came from, who made it, etc. They have heard that there are large numbers of Yernoids in that area, but have never investigated these reports.

Or, the Yernoids are another form of revenge that the Sathar foisted on the Eorna. In retaliation for the Eorna's manipulation of the Sathar genetic code, the worms released a muta-genic virus (*OK*, this is pseudo-science here, but "muta-" stands for mutation, and "genic" is short for genetics) that replaced the infected hosts' DNA in their reproductive system with something more primitive. The offspring of those who were infected became Yernoids and were thus shunned by the "untouched" survivors.

If one uses this last option to explain the existence of the Yernoids, then you can assume there were far more than 150 survivors after the Day of Doom.

Concluding Thoughts Eorna Technology and Mentalism

StarFrontiers.com contributor Chris D. Putnam offered a few other thoughts on Eornan technology in a 2009 post.

"The Eorna technology itself was rather incompletely defined," Putnam wrote. "If the Eorna really are technology adept at manipulating telepathy (such as their insanity machine, programmed illusion room, and hypnotic robots), then their interfaces with their technology ought to also use telepathy.

"This suggests that there will be no keyboards, monitors, or other useful interfaces," Putnam continued. "The one described Eorna weapon, the psi stunner, is really equivalent to the sonic stunner with the sole exception that anti-shock isn't a defense."

If the Eorna have Mentalist disciplines, as described in Zebulon's Guide to Frontier Space, Putnam recommends that their appropriate disciplines should include link, paralyze, shield, suggestion, telepathy-aliens, illusion, fear, empathy, confusion and detection, but probably not disciplines like teleportation.

These are some suggestions on how you can flesh out the Eorna as a race for your campaign.

FOOTNOTES

ⁱ Verrault, Tom. "New Volturnus encounter location: 900 year old Eorna Starport," Volturnus Revisited, <u>http://www.starfrontiers.us/node/8361, October 5, 2014.</u>

ⁱⁱ <u>http://www.starfrontiers.us/node/9304</u>, "Encounter at Lizard Head Rock," jedion357, May 20, 2016

ⁱⁱⁱ Cook, David. "The Coming of the S'sessu," Dragon Magazine No. 96, p. 84.

^{iv} This idea is partially inspired by a story called "The Real Reason the Sathar Bombed Volturnus" that was posted by Username: Kveldulf on <u>http://majesticworlds.com/fnn/history/sathar-peaceful-race.html</u>. The reason given by that writer is that the Sathar were attempting to throw off the oppressive Clikk and the Eorna betrayed them.

^v Verreault, Tom. "Zebulon's Guide to the Boon'Sheh," Frontier Explorer 13, pp. 7-9. Based on an original story by Goblinardo in Star Frontiersman magazine issue 3, pp. 30-31.

FE

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I want to say thanks to our patrons for their contributions.

The money raised will be used to improve both the <u>Frontier Explorer</u> and <u>Star Frontiersman</u> magazines in various ways including improved web hosting, improved software and hardware for production, website upgrades and improvements with the magazine itself.

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This encounter can be used with any of the primitive natives on Volturnus as a part of the Volturnus campaign. It can be a bonus or alternative encounter as the referee sees fit.

THE BASIC PLOT

A scout from one of the primitive races has scouted the hulk of a wrecked star ship and brought back trinkets of technology and bits of "star metal" for trade and tool making. Unfortunately, the atomic engines on the wreck are leaking radiation and most if not all of what he brought back is "hot" with radiation.

The scout has had prolonged exposure to radiation and died not long after his return. His trade goods have dispersed amongst the tribe and now a large cross section of the tribe is sick.

SET UP

UL-MOR

A rider from the sick Tribe, which just happens to be closely allied with Arthru Sea People's Bane's tribe comes seeking help from the shaman. Arthru is loath to send his shaman and asks the PCs to investigate. He will send a rider with them, Morad Sandsifter, to guide them there and back. (Morad will pitch his tent separate from the other tribe lest he become sick.)

The PCs will need to identify the sickness as radiation sickness and locate all the sources. They may need to barter for some of the trade goods and star metal and then disease of it. The will be use with

dispose of it. They'll leave with the tribes gratitude once the sick show signs of recovery.

KURABANDA

The sick are members of the kurabanda village. The encounter can be used to gain acceptance to the village or as the kurabanda portion of the A,B,C quest in "Starspawn

of Volturnus". If used for acceptance the hang gliding roller hunt and barbecue are the celebration for the PCs solving the mysterious illness.

EDESTAKAI

The basic plot can be used in a similar manner with these primitives as well.

THE ULTIMATE SOURCE

The original scout who found the wreck died from Radiation exposure and this was to make it difficult or impossible for the players to investigate the wreck. This need not be so. The "Volturnus Desert Encounter" in Star Frontiersman #13 would work well enough with this encounter. Alternately the ruins of the eorna Cape Canaveral could be located by the PCs or even the wreckage of a sathar ship that attacked Volturnus 900 years ago. It is important that the PCs learn of the presence of pirates on Volturnus but it's equally important that they learn of the eorna and the sathar having been here as well.

REWARDS

Experience point rewards should be based on player participation and difficulty; 2-3 per PC should work for solving the mystery of the radiation sickness.

Extra time spent riding lopers to travel to see the other Ul-mor tribe might provide the PCs with 0 level loper riding skill (as a reward) meaning they would not be at -20 for riding lopers in the Great Game encounter presented in the third module.

Investigating a wrecked star ship might generate important clues for the PCs or even material artifacts if they can find some uncontaminated by the

radiation.

ADDITIONAL RESOURCES

Star Frontiersman #13 "Volturnus Desert Encounter"

Star Frontiersman #17 "Radiation Sickness on the Frontier"

FE



The beautifully crafted Volturnian Psy-crystals are made by eorna craftsman. They briefly glow blue for a few turns when psychic energy is used nearby. They are typically worn as a pendent.

The properties of these crystals are ill understood despite intense scrutiny into their workings. It does seem that the cut of the crystal is important somehow. Eorna gem cutters developed a specific cut known as the "psy-cut" which optimizes the effect of these crystals.

The crystal glows blue for a few seconds after detecting the use of mentalism powers within its detection range. A wearer can determine direction to the use of psychic powers by turning it as the crystal glows markedly brighter when its tip is pointed toward the direction of psychic use.

Raw psy-crystals are cut down into smaller crystals and cut with the psy-cut. The recent tendantcy has been to cut them down to gain the maximum number of psy-crystals for commercial sale. This has flooded the market with tiny psy-crystals that barely perform their function and are next to useless due to their limited range.



The largest psy-crystals date from before the sathar's genocidal visit to Volturnus. No raw crystals of this size category have yet to be found in the modern era. These are considered important artifacts and rumored to have powers beyond those of smaller crystals. Of the 5 known to have survived the past 900 years 4 are on Volturnus in the hands of Ul-mor shamans or the eorna. One is on loan to Star Law at a research facility on Morgaine's World.

There are persistent rumors of mega-corps or the Family of One coming into possession of one of these sized crystals but there is little evidence of this.

Mentalist masters sometimes pass on a psy-crystal to their trainees. Other times a mentalist practitioner must search out a psy-crystal on their own. The cadres concerned with mentalism are constantly combing the market for crystals larger than tiny.

PSY-CRYSTAL (SIZE TINY)

This crystal has been cut down to 1cm diameter pendent. It only detects psychic energy usage up to 10m. They are by far the most common psy-crystal and considered relatively worthless by most mentalist due to the limited detection range.

Weight: n/a. Cost: 50 Cr.

PSY-CRYSTAL (SIZE SMALL)

This crystal is 2 cm diameter and detects psychic energy up to 25 m.

Weight: n/a. Cost: 250 Cr



PSY-CRYSTAL (SIZE MEDIUM)

This crystal is 5 cm diameter and detects psychic energy up to 50 m.

Weight: 0.1 kg Cost: 1000 Cr

PSY-CRYSTAL (SIZE LARGE)

This crystal is 10-12 cm diameter and detects psychic energy up to 100 m. All of the known crystals of this size are historic artifacts claimed by the eorna as part of their cultural heritage though one is in the possession of Star Law and two are held by Ul-mor shamans. They are considered priceless by the eorna though a Capellan Free Merchant might put a value on it. They have been rumored to amplify psychic power as well.

Weight: 0.25 kg Value: 100K to 500K Cr





When members of the Volturnus Survey Expedition 2 negotiated with the mechanons for their assistance to fight the sathar at the Battle of Volkos, no one foresaw the far ranging effects of the treaty they signed. The mechanons have scrupulously kept the treaty while noting every violation by the eorna, the mega corps, and individual members of the United Planetary Federation.

Because there were members of the "core four" species from the UPF negotiating on behalf of the eorna, the mechanons consider this treaty binding on themselves, the eorna and all citizens of the UPF. Naturally enough the mega corps, the UPF governor of Volturnus, and the eorna failed to realize the implications of this.

Despite their disdain for biological life, the mechanons have steadfastly avoided wiping out any species that existed on Volturnus at the time the treaty was first negotiated. This is due to the clause in the treaty that states, "what is, is what will be." The mechanons interpret that to mean that all life that existed on Volturnus at the time of the treaty negotiation must be preserved. It also is interpreted by them to mean no new biological forms will be created on Volturnus by any of the treaty signatories. (Something the eorna were wont to do.)

The problem arises in that the eorna, the mega corps, and all UPF citizens happily kill and exterminate any sathar bio-forms that are technically covered by this treaty interpretation. The mechanons have carefully monitored the progress of slitherer, quickdeath, and cybo-slug extermination programs.

With each perceived treaty violation the mechanons have sent a delegation to Volkos to confront the eorna. During the dialog that ensues the mechanon envoy restates the crucial clause, "what is, is what will be." The eorna leadership have repeated this back thinking that it's purely a reaffirmation of the original treaty while the mechanons view it as a new treaty negotiation.

From the perspective of the mechanons, the eorna, the mega corps, and the UPF are repeated treaty breakers. The anti-biological faction within mechanon society has been in ascendancy and trouble is brewing.

The spark will come from a triple treaty violation. First, new construction at the PGC enclave will inadvertently wipe out a species of plant. Secondly a "sape" escaped a corporate enclave and was captured by the mechanons. The sape is clearly a bio-engineered creature and from the mechanons' view a treaty violation. Thirdly, Streel Corporation located the deactivated body of a mechanon in some ruins and attempted to recreate a mechanon personality matrix but in a standard, UPF-built robot body. This was the last straw for the mechanons. The antibiological party finally had the leverage to take control of mechanon society.

They sent an envoy to the eorna who simply stated, "what is, is not what will be." He then turned and left. The eorna leadership were still debating the meaning of the cryptic message a day later when the mechanon revolt erupted.

The mechanons began the revolt by marching to Volkos and employing scorched earth tactics killing anything biological in their path. This meant that their wrath fell heavily on the Ul-mor tribes in the desert between the Mechanon Mounds and Volkos. At the same time mechanon air assets strafed the star port and the corporate enclaves taking out shuttles, star ships, and air vehicles.

Advanced mechanon units began arriving at Volkos, the corporate enclaves, and the star port within 2-3 days. While they were not effective in besieging these areas they did skirmish with Star Law, corporate, and eorna militia.

With the bulk of the mechanon army bearing down on Volkos, Star Law urged the evacuation of the corporate enclaves to the relative safety of the city walls of Volkos. Not all corporate personnel made it to Volkos.

Starships arriving in system during this time were attacked by mechanon fighters. SpaceFleet dispatched a strike force from Prenglar but it would take days for it to arrive.

The eorna insisted on defending all of Volkos from the besieging mechanons and the first assault was repulsed. In the second assault the mechanons focused heavily on two points of entry while token forces demonstrated at all the others. They succeeded in penetrating the city forcing the Star Law commander to pull all of his available forces to the city center. The hasty barricades and defenses barely held back the mechanon onslaught.

The defenders held and the mechanon war faction collapsed with the arrival of the Space Fleet strike force. The peace faction hurriedly negotiated with the eorna and Star Law before they knew of the arrival of the strike force.



AN EXPANDED SYSTEM BRIEF

Much of Volturnus remains a "Planet of Mystery" even after the players complete the three introductory modules.

The Zebulon star system is also shrouded in confusion especially after the release of Zebulon's Guide to the Frontier. The modules seem to indicate that the players would already know about the Sathar, but Zeb's appears to make Volturnus the first-ever known encounter with the evil worms.

Zeb's adds a second inhabited planet – Anker – to the system which left many of the game's fans wondering how it would have been missed in the module's system brief. Does this world have a breathable atmosphere?

Using information posted by various fans on the StarFrontiers.us website, this story will flesh out Volturnus. As a link between the United Planetary Federation and the Rim Coalition, Zebulon is one of the most important systems in the Frontier.

WHAT THE MODULES TELL US OF VOLTURNUS

Written by Mark Acres, Tom Moldvay, and Doug Niles, the "Crash on Volturnus" module informs the players that the Zebulon system "was first investigated 20 years ago by an unmanned probe launched by Truane's Star." The current game year is never explained.

The probe indicated that Volturnus is the **only** inhabitable planet in the system and may hold great mineral wealth in the form of molybdenum, tungsten, gold and other heavy metals. Circling Volturnus are its two moons, Leo and Lulu.

The system briefing for the referee further mentions that the planet is "named after the Greek god of the southwest wind. Volturnus is a hot, dry world with many types of hostile terrain. The endless deserts, rugged mountains, volcanic wastes, and dangerous salt flats are constantly scoured by the southwesterly wind. Despite these harsh conditions, rare patches of forest and even a few lakes have managed to maintain a perilous existence." Granted, the entire planet would not be subjected to a "southwesterly wind." The original description is probably there for poetic reasons.

With a diameter of 12,895 kilometers, Volturnus would have a surface area of 522,000,000-square-kilometers but the area map provided for the referee only covers a very tiny fraction of the planet – 600-by-400 kilometers or 240,000-square-kilometers.

Imagine looking at Colorado and figuring that is what the rest of Earth looks like. Much of the planet is a vast empty canvas for the referee to fill up and includes a body of water that is described as "the remnant of a vast salt sea that once covered the area." So there is more water on the plant than just "a few lakes."

The third module, "Starspawn of Volturnus" further mentions that the planet's history "is so varied, and areas of it have been purposely left blank, that any number of adventures of the referee's own making cold be fit onto this bizarre planet." Of course, game masters always have the option of altering modules to fit their own campaigns.

The planet was devastated by the Sathar some 900 years ago, but enough life remained for the Eorna to manipulate to create the Ul-Mor, Edestekai and Kurabanda. Other creatures included winged rippers to lopers, yernoids, land whales and more of a Dungeons & Dragons type of menagerie.

TIMELINE PROBLEMS AND ANKER

An early article provided background material about the Volturnus expeditions and the history of Truane's Star. Written by Stephen Bonario for issue 98 of Dragon magazine and entitled "The Zebulon Connection," the story said that a "human merchant named Seccitte Zebulon" had misjumped into the then uncharted system in the year 44 FY. He later sold his astrological information to the government of Pale.

Yet the Zebulon's Guide timeline provides us with a different version and seemingly destroys the purpose of the modules at the same time.

According to Zeb's: "61 PF The Zebulon system is discovered by Professor Alorne Zebulon, the Frontier's most noted scientist, explorer, and educator. The planet Volturnus is settled almost immediately. Anker is discovered but not settled until 57 PF...

"57 PF Anker (Zebulon system) is explored and settled. Professor Zebulon founds the University of Zebulon."

Needless to say, the flawed Zeb's timeline has led to a great deal of consternation by fans of the Volturnus modules.

Many have tried to create their own alternative timelines, while salvaging the useful information from the TSR book. One of the most recent endeavors was the "Canon Non Zeb's Guide Timeline" (<u>http://www.starfrontiers.us/node/9300</u>) that set the three modules around the year 65 FY as was established in Bonario's story.

For the purposes of this article, we will (mostly) forget that the Zeb's timeline exists, but we will rescue Anker from the book. Anker is listed first in Zebulon's Guide, possibly indicating it lies closer to the star than Volturnus though this is unclear.

With one moon, Anker's gravity is 0.9 and its day is 20 hours long. "The site of the University of Zebulon, the Frontier's largest and most prestigious institution of learning," Zeb's says, "the entire planet has been set aside for the U of Z, as well as one of the Frontier's largest zoos."

One could argue that the description in Zeb's seems to indicate that Anker might have a breathable atmosphere. Then again, if the atmosphere was hostile to the Core Four races, the university and the zoo might actually be housed in biospheres.ⁱ

VOLTURNUS BEFORE THE DAY OF DOOM

We can conjecture that Volturnus had a much gentler environment than the Frontier adventurers found 900 years after the Day of Doom. My concept is that its climate was already moving from being a garden planet to a post-garden world where it was getting progressively hotter. (see map on page 17)

At the height of the Eornan civilization, they could control the weather and tapped the power of the planet's core. Vast deserts still covered the equatorial regions, but the burning lands, salt flats and the like didn't dominate the world.

Instead, the planet had lush forests and expansive plains where land whales and rollers were allowed to roam in nature preserves. The Eorna had 52 mega cities, including its capital Volkos, which covered hundreds of kilometers of crystalline and stone buildings along with vast parks and artificial lakes. Only a few volcanoes actively spewed eruptions while the north and southern oceans were linked by the shallow Hlnarr Sea.

The naming conventions for various places on the map were developed by Aemonaylward, who is another member of the StarFrontiers.us website. Other sites bear a later Pan-Gal translation.

"I tried to stick to a few similar morphemes – you could say they are rooted in Middle Eornan – including 'vol-' (city), 'kalx-' (place of), 'amnad-' (mountain)," Aemonaylward wrote. "Variations on those roots could be clustered in different areas which were once the different Eornan nations, with their divergent tongues."

Along with Volkos, other major Eorna cities included: Vorfrix, Vortuluntux, Volurtsh, Vorfolx, and Volsapsh.

Vorfrix was the site of major cultural institutions and museums, set along the inland Hlnarr Sea. Vortuluntux was once the capital of a major Eorna nation. Volurtsh was a national capital. Vorfolx was a major industrial city with robotics factories; the Mechanons could have a major presence here. Volsapsh was another capital city and major industrial center.

The Sathar bombardment destroyed the Eorna's artificial climate controls and power systems, helping to radically change the world's climate.

Nine centuries later, deserts and burning lands covered much of the planet. Hlnarr Sea would be renamed as the Salt Sea by Frontier explorers. Though not entirely dry, salt flats dominate the area where the sea once supported a vast underwater eco-system. This is where the proto-Ul-Mor once lived.

A number of actively erupting volcanoes spew ash and soot into the atmosphere while lava flows have buried some of the evidence of the Eorna's civilization. In other areas, the remains of the vast cities continue to decay as nature reasserts itself.

LOOKING AT THE ZEBULON SYSTEM

Unlike some of the later Star Frontiers modules published by TSR, we know very little about the Zebulon system other than what was in Zebulon's Guide.

Was the system discovered by Seccitte Zebulon, a merchant, or the great explorer Alorne Zebulon? Are Seccitte and Alorne really one in the same person?

It does not appear that the writers of Zebulon's Guide gave much thought about incorporating the first three modules into their revamped game universe. Nor did they seemingly use Bonario's article in Dragon magazine as a guide.

The modules never indicate that anyone explored the route to Zebulon other than saying a robotic probe was sent there. The referee can scrap both Seccitte and Alorne and go with the modules explanation that a probe was used to chart the route. Or a referee could draw on Bonario's story that the human merchant discovered the route to the system.

If you like having an Indiana Jones-like figure, then you can rescue the personage of Professor Alorne Zebulon – the Frontier's greatest explorer – but alter the timeline. You might even argue that Seccitte and Alorne are one in the same person – i.e. he was a merchant became a great explorer or maybe he was an explorer first, fell on hard times, and was scratching out an existence as a merchant before charting the route to Volturnus.

One other alternative exists.

Alorne and Seccitte are related individuals. Both would lay claim to discovering the route to the Zebulon star system and had a legal battle that helped delay the opening of the star route to exploration and colonization by others.

That last alternative is one that I am using for my campaign. I decided that the Zebulons were cousins who once worked together. They had split up and became bitter rivals, but that is the subject for another story.

Note, altering the Zeb's timeline also means that the UPF would not have contact with the Rim Coalition until *after* the Volturnus modules are played.

A MORE DETAILED SYSTEM BRIEF

A detailed Zebulon system brief was posted in 2009 on the StarFrontiers.us website by Chris D. Putnam. A contributor to the old Star Frontiersman magazine, Putnam's brief was part of his fan-created but incomplete rewrite of the three modules under a project called "Staging Ground Volturnus."

What follows is based on Putnam's work.

SYSTEM DATA: ZEBULON

Spectral Type: G2 Yellow Total Planets: 4 Asteroid Belts: 2 Inhabited Planets: Anker, Volturnus

Major Trade Routes:

- Pale and New Pale (Truane's Star) Distance: 5 light years
- Faire, Homeworld, Ifshna (Capella) Distance: 10 light years

SYSTEM HISTORY

Zebulon is a G-class main sequence star that contains two asteroid belts and four major planets. The entire system appears to have been influenced by the gravitational capture of Star's Hope sometime in the distant past.

It was the home system of the Eorna who developed space travel. They had explored several nearby systems in what today is the modern Frontier Sector before the Sathar attacked and virtually annihilated their civilization. The Xagag Dust Cloud and the Lesser Morass Nebula offer brilliant displays to travelers through the system.

ZEBULON'S PLANETS AND ASTEROID BELTS

ANKER (ZEBULON I)

Anker is a hot world, close to Zebulon but within still the habitable zone. Before the Day of Doom. the had Eorna several small colonial cities housed in bio-spheres. Their terraforming operations were disabled during the Sathar attack. The UPF reactivated the biospheres, which became



Image by http://donjon.bin.sh



Not to scale

Diagram created by Chris D. Putnam

home to the University of Zebulon and one of the Frontier's largest zoos.

Population: moderate (approx. 250,000), mixed. Trade: E (Education). Atmosphere: medium, unbreathable. Hydrosphere: 21 percent water, 1 percent ice. Orbital Radius: 0.81 AU Orbital Period: 0.37 GST years Gravity: 0.9 Day: 20.1 GST hours Satellites: Plato.

GodCo has been contracted to restart the terraforming process, which is expected to take more than two centuries. Before 111 FY Star Play had established a Rest and Recreation Station (RSS) in orbit.

VOLTURNUS (ZEBULON II)

Volturnus is a habitable planet with infrared signatures of nitrogen, oxygen, water, and water vapor in the atmosphere. Volturnus is the Pan-Gal name for the planet which is homeworld of the Eorna and their "starspawn" that include the Ul-Mor, Kurabanda, Edestekai and the Mechanons. (A fifth intelligent race, the Arborean, was introduced as an optional race by R. Kevin Smoot in issue 6 of Star Frontiersman magazine.) The planetary brief is written from the year 111 FY.

ASTEROID BELTS: (ZEBULON III AND IV)

These asteroid belts appear to have been generated by gravitational collapse of planets in the Zebulon system when Star's Hope was captured. One asteroid belt is at 1.83 AU and the other is at 5.74 AU. They are dense enough in places to be a problem for interstellar flight. All incoming vessels are suggested to enter the system between Star's Hope and Zebulon VI before heading to Volturnus or Anker. This may add several days to a ship's journey.

STAR'S HOPE (ZEBULON V)

Star's Hope is a massive gas giant that is very close to the mass of a brown dwarf. The orbit of Star's Hope is in the opposite direction of all other objects in the system and is tilted by 20 degrees off the plane of the ecliptic of the other worlds, suggesting that it was a rogue planet that was captured by Zebulon. The Eorna have known about the world for all of their recorded



Image of a brown dwarf star. Source:

https://www.flickr.com/photos/g sfc/19641761103/in/dateposted/

history. During the height of their civilization, they had small research outposts here, but they were abandoned after the Day of Doom. Atmosphere: dense, unbreathable.

Orbital Radius: 10.56 AU.

Orbital Period: 34.92 GST years.

Satellites: 5 small moons, 11 large moons. Ten of the large moons have their own atmospheres; seven have water.

SUB-ZERO (ZEBULON VI)

Sub-Zero is an ice planet that may have been formed by a number of Kuiper belt objects coming together. The Eorna once had a robotic research station here, but the facility has been abandoned for nearly a millennia.

Atmosphere: trace, unbreathable. Orbital Radius: 41.4 AU. Orbital Period: 270.91 GST years. Gravity: 1.2. Satellites: 4 small moons.

PLANETARY BRIEF

VOLTURNUS (ZEBULON II)

Moons:

- 1) Leo: Completes an orbit every three days, reddishorange in color. The Eorna once had a defense installation here with defense laser batteries and a squadron of heavy fighters.
- 2) Lulu: Completes one orbit every 27 hours, bluishsilver in color. The Eorna once had lunar colonies here, but they have been abandoned since the Day of Doom.

Space Stations: Armed Space Station (ASS).

Distance from Star: 1.13 AU

Axis Inclination: 8 degrees

- **Climate Range:** Hot, arid to humid. Average surface temperature: 25 degrees C
- Atmosphere: Breathable, 78% nitrogen, 21% oxygen, 1% argon

Hydrosphere: 30% water, 15% ice

Gravity: 1.0013

Colonists: Multiple, Light (approx. 90,000 by 111 FY)

Trade: BIR (Business, Industrial, Resource)

Diameter: 12,895 kilometers

Length of Day: 24 GST Hours, 03 GST Minutes

Length of Year: 1.21 GST Years

Native Life and Population:

- 1) Eorna, a race of dinosaur-like bipedals. They are the original sentient race on Volturnus. Population: Light, more than 50,000.
- 2) Ul-Mor, a nomadic race of novepi (nine-limbed creatures) that were first encountered in the deserts but live across the southern hemisphere. Related to the nomadic tribes are the "Sea-Mor." They live along and in the water, but are basically the same as their land-dwelling cousins. Population: Moderate, Approx. 420,000.
- 3) Kurabanda, a race of mostly forest-dwelling bipeds

similar to tarsier monkeys. Many have developed the use of hang gliders for hunting. Population: Moderate, Approx. 380,000.

- Edestekai, hill-dwelling tripeds, trilaterally symmetrical. They have developed farms and worship quickdeaths. Population: Moderate, Approx. 220,000.
- 5) Mechanons, a race of mysterious intelligent machines that arose from the Eorna's robots. They mostly live underground and use a vast array of transport tubes (subways) but they have a heavy presence in the old Eorna city of Vorfolx. Prior to the Mechanon migration, their estimated population (including robots of lower intelligence) is estimated to be moderate – approximately 6.5 million. By 111 FY, their remaining population on Volturnus is still estimated to be moderate but numbering less than 500,000. Approximately 10 percent of this populace includes "true," higher-caste Mechanons. Many are hostile to biological life forms.
- 6) Arboreans, a race of flightless avians (optional). Derided by some Human observers as "chicken men," the Arboreans are a more recent Eorna effort to raise up yet another species to sentience. They have domesticated Volturnian Eagles and Air Whales. Population: Moderate, Approx. 150,000.

PLANET DESCRIPTION

(See map on page 18)

Named after the pagan Human god of the southwest wind, Volturnus is a hot, dry world with many types of hostile terrain. Its endless deserts, rugged mountains, volcanic wastes and dangerous salt flats are often scoured by a strong wind.

Despite these harsh conditions, two small, salt oceans, fresh water lakes and streams, shard grass plains and a few forests manage to maintain a perilous existence. The planet has eight continental plates, though six of the continents appear fused together in a giant Pangaea-like land mass. The north pole continent is mostly covered with ice sheets while the south pole continent is a bit larger with habitable areas where the ruins of two Eorna cities can be found.

Volturnus is the Pan-Gal name for the Eorna's homeworld, which originally was called Rha'atha in the Middle Eornan dialect.

Major planetary features include:

- Amandstruk Valley. Once a series of fresh water rivers, lakes and seas, this is a major fault line where earthquakes occur.
- Arkalmnad Mountains. This is an area where the Eorna mined crystals for use in their buildings, ships and robots.
- **Crystal Mountains**. These crystalline peaks are east of Volkos. A small range, it is not shown on the world

map but does appear on the geodesic triangle map. Its mountain tops gleam in the sunlight on clear days.

- **Fire Mountains**. Similar to the Gas Mist Mountains, this range has a number of active volcanoes. At night, the glow of lava can be seen for many kilometers away.
- **Glurmnadi Mountains**. This range is on a peninsula that juts out into the Salt Sea.
- Great Central Desert. Covering thousands of square kilometers, it is bounded between the Spalkalx Mountains to the north; the Arkalmnad Mountains to the west; the Fire Mountains, Mist Mountains and Crystal Mountains to the south; and extends eastward all the way to the Amandstruk Valley. Although once much smaller, this ancient desert has existed for all of the Eorna's recorded history.
- Heartbreak Ridges. Previously known as the Yahlormnador Mountains, this was the site of many survival shelters built by the Eorna in times past by one of their nations when the race was not so peaceful. During the Sathar attack, many refugees fled to this region only to die. The Eorna survivors had hoped to find more of their kind living in these shelters but found only death. Heartbreak Ridges is the Pan-Gal translation of the Eornan name for the region.
- Kalxfol Canyon. A great series of rifts in the earth. It is actually a fault line where violent earthquakes occur.
- Mist Mountains. Also called the "Gas Mist Mountains," a spur of this range runs near the city of Volkos. Ash clouds, smoke and foul gases tend to cover these peaks due to off gassing from volcanoes and volcanic vents.
- **Olkursht Mountains**. This is the range found on a large island that is at the north end of the Salt Sea.
- **Olmnad Mountains**. A range bordering the Salt Sea's southwestern shore.
- **Olmnadk Mountains**. A mountain range along the northwestern shore of the Salt Sea.
- **Olsymnadt Mountains**. A range along the eastern shore of the Salt Sea.
- **Rinoktkalk Waste**. Another formerly garden region, it now has some of the harshest burning lands and rocky barrens on the planet. The remains of five Eorna megacities can be found here.
- Salt Sea. This is the ancient Hlnarr Sea, which had mostly dried up by the time the Frontier discovered Volturnus. This area is mostly covered by salt flats, but with some areas of open salt water. Although some parts of it seem solid, there are many areas where briny rivers and lakes of water exist underneath. Persons – or vehicles – crossing these flats may encounter weak spots where they can fall through the crust and drown.
- **Spalkalx Mountains**. A huge are of mountains, plateaus and valleys in the northern hemisphere, this region is the site of many old Eorna mining operations and towns. It still has rich deposits of rare earth metals

needed to make starship engines and advanced parabatteries.

- Star Devil's Cauldron. Another secret site where the Star Devil Pirates had established operations.
- Sythnakalk Desert. Once a vast, lush forest and shard grass plain region, only a remnant of woods and farmland remain along the northern ocean. It is bounded by the Heartbreak Ridges and the Sythnamnadar Mountains to the south.
- Sythnamnadar Mountains. A range of crystalline peaks that is much larger than the Crystal Mountains near Volkos.
- Volsapsh Waste. This northern plain, now covered by deserts, rocky barrens and burning lands is named after the ruined mega-city of Volsapsh.

The map key on page 3 of the Crash on Volturnus module provides explanations for other features that can be found planet-wide such as:

- **Bachanda Forest.** Giant thorn plants cover the floor of the forests so creatures must travel along the limbs of giant bachanda trees.
- **Burning Lands**. This barren, rocky ground often ignites when its free phosphorous contacts the atmosphere.
- **Rocky Barrens**. Though desolate and stark, this dry, rocky wilderness has more vegetation than the deserts.
- Shard Plains. The shard plains are covered by vast areas of glass-like shard grass. The grass cuts any creature walking through it.

A discussion of the ancient Eorna and their civilization will be in a separate story.

REGIONAL MAP AROUND VOLKOS

(see map on page 19)

The geodesic triangle map provides a closer look of the region around the city of Volkos. This was created using the map templates created by GDW for its Traveller 2300 game.

Each hex is 1,000 kilometers wide, so the Volturnus map would fit within one hex. Here the Crystal Mountains are shown along with a spur of the Gas Mist Mountains and a small area of desert.

The Sea of Klaalbet represents the water south of the desert and salt flats on the TSR Volturnus map. It feeds into the much larger Southern Ocean.

The ruined city of Volmrenna that is east of Volkos was once a seaside community known for its artistic works and manufacturing capabilities. Due to earthquakes and the Sathar bombardment, about half of the ruins now lie underwater.

The ruins of Volaeddolv on the Isle of Kalxixuxxi was once a port city, but as the waters retreated, it is now more than 100 kilometers inland, bordering salt flats and small salty lakes on one side and bachanda forests on the other.

POPULATION DISTRIBUTION MAP

(see map on page 20)

The populations provided for the various races are based on a population growth calculator (see this page <u>http://www.metamorphosisalpha.com/ias/population.php</u>). If the Eorna started with about 150 individuals 900 years ago, assuming they all didn't go into stasis, at a growth rate of 0.012, they would have had a populace of nearly 6.8 million some 900 years later.

However, their growth rate is lower because of the devastation and the fact that not all 150 of the survivors were of reproduction age. If only 50 Eorna could have children, with a growth rate of 0.005, they would have a population of 4,450 nine centuries later.

Since the module says that the Eorna had many children with genetic defects, let's say 50 percent, they might still have a populace of 2,225.

If about 40 percent of the 2,225 normal Eorna are of combat/working age, which means nearly 900 would have been available to fight the Sathar in the last Volturnus module.

Of course not all of them would be available or be armed – some would be kept in reserve or were elsewhere on the planet. So the module's figure of about 100 laser-armed Eorna fighting alongside Colonel Jameson would be about right.

The remaining population figures for the Ul-Mor, Kurabanda, Edestekai and Arboreans were based on an initial populace of 1,000. The Mechanon figure was arrived at by an estimate of what rate they would build more machines.

None of the races – except for the Mechanons and later the Eorna – would have any major communities of more than a few hundred. They are scattered about the planet.

Hopefully these details will make Volturnus a little less of a mystery for the referee.





Before the Day of Doom



This geodesic map grid divides the spherical surface of any globe in to twenty triangles, each of which is further divided into hexagons. Total number of hexes per triangle: 25. Total number of map hexes: 500 3. Diameter: 12,895 km Volturnus (Zebulon) 2. World Name 1. Date of Preparation 10/13/2016 World Map Grid

World Map Grid

IS Map Form 8





World Map Grid

IS Map Form 8





Cordial greetings to all beings. Dwain, Tik and I are pleased to introduce another creature to our Frontier Explorer readers. We recently received a visit from Captain Burbel who gifted us with a most unusual and unexpected gift. Burbel went out of the way to make the extra jumps to get all the way out here to Scree Fron. The extra cost was all about 4kg of a silent creature that every dralasite thought never made its way to the Frontier. Dralasite records detail a creature of their home world that is elastic like them and has an excellent ability to copy the form and texture of many things. How Burbel got a mubobp he never said, but once it budded Burbel couldn't think of a better place to care for it.

MUBOBP AND DRALASITES

Mubobp were common in dralasite homes before industrialization. They are excellent pest control, decoration, and entertainment for a dralasite home. Dralasites love shapes and the mubobp can take the shape of most anything, plus the mubobp can texture its skin and change its pigment to match the thing it is copying. They have a very developed chameleon ability. This allows the mubobp to lay in wait for pests and catch them most effectively. Dralasites once put mubobp next to things that pests congregated around and the mubobp would



copy and blend in with them. Then as the pests crawl over and around the mubobp the mubobp would use their very fine muscle control to grab a hold of the creature's appendages and prevent them from moving as if they were sticky. Once the creature was grasped then the mubobp would form a pouch around it and digest the creature.

The other thing that made mubobp popular among dralasites was using a mubobp as a decoration around a home with the added spin of a little entertainment as well. Mubobp can be trained to retain a given shape for very long periods of time through food reinforcement. This encouraged Dralasites to continue to keep mubobp in their homes after industrialization as decorations. A dralasite might find a sculpture or natural object with an interesting shape and put their mubobp next to it and through food reinforcement train it to take that shape on a gestured command. The mubobp would then be returned to the dralasites home and placed in that shape as a decoration that they would feed periodically. We tested this out with our mubobp by placing it with several different things to see what it could accurately disguise itself as. Presented here are four forms the mubobp could pose as and one that it could not. Take a guess at which is a real item and which are the mubobp.

Dralasites also used the mubobp for entertainment, especially as jokes. A mubobp may pose as a vase with a very pleasing shape that is desirable for other dralasites to touch and handle. The mubobp owner would place the mubobp in a location that invited admiration and invite guests over. Then when one of the guests picked up the vase to admire it the owner would engage the guest in conversation to keep their mark busy holding the posed vase and not notice that it was not the real thing. All that is needed is a few minutes of distraction and the mubobp can get a grip on the dralasites hand by working the fine muscles along the surface of its skin to conform to the texture and surface of the dralasites hand. Then when the dralasite victim catches on that something is touching its hand they find out that letting go is not possible. The joke is had and laughs go around. Of course if the dralasite does not pull the mubobp from its grasp the mubobp will by instinct slowly fold over the dralasites hand and begin to digest it ever so slowly.

However, if a substitution joke was not to be had, then the mubobp owner could gain applause by demonstrating the various funny shapes the mubobp had been trained to do

Four Forms

upon command. As many as a dozen memorized shapes were said to be attainable to a well-trained and drilled mubobp. Then when the trained shapes were all demonstrated and all that fun expended, random objects would be placed with the mubobp to elicit other funny shapes. Dralasites with a well-trained and responsive mubobp enjoyed the popularity of friends who would bring objects with the explicit intention of showing them to the mubobp and getting it to pose.

MUBOBP LOOK AND FEEL

Mubobp range in mass from about a kilogram at budding to about eight kilograms when well developed, fed, and ready to bud. This gives them sizes of about seven centimeters in diameter to thirty eight centimeters in diameter. Our little mubobp weighs in at four kilograms and is about twenty five centimeters in diameter. We placed it in a white box for a few days and it formed into a roundish shape and rolled ever so slowly around seeking a way out of the box. Its color turned gray like a dralasite and its skin texture became knobby. Only in this form could the very fine eye spots be seen on either side of its ball form. Unlike dralasites, mubobp eyes can perceive color.



Mubobp unformed

When we placed it with a log of wood the mubobp formed a shape like the log of wood after slowly moving around and over the log to discern the shape, texture, and color of the log. The texture of the log was very close to the real log when feeling one and then the other. If the real log had not been present for comparison then it is doubtful that anyone would notice. The colors of the log were even better. Optical scanning quickly detected the difference, but neither, vrusk, yazirian, nor human eyes accurately identified the real log versus the mubobp log form. We rounded up a visiting dralasite and it didn't score any better in our random tests.

Mubobp				
TYPE:	Omnivore			
SIZE:	Small : 28cm			
NUMBER:	1			
MOVE:	Very Slow, 1 m/turn			
IM/RS:	1/10			
STAMINA:	30			
ATTACK:	Digestion			
DAMAGE:	1 point / hour			
SPECIAL ATTACK:	None			
SPECIAL DEFENSE:	Natural Camouflage			
NATIVE WORLD:	D: Dralasite home world			

We later placed the mubobp with a stone and again were rewarded with an astounding demonstration of it formed as a stone. Our tests resulted in the same results as with the log. Dwain then got curious about how well it could do a smooth texture with contrasting colors and Tik suggested we get a vase as the dralasite stories speak about. We didn't have a dralasite vase but Dwain produced one of his wife's vases. The mubobp succeeded in impressing us with a nicely smooth texture and a very nice copy of the tree painted into the glazed surface of the vase.

Right after this Dwain impulsively dumped a snake in with the mubobp. Tik and I initially were worried that the snake might harm the mubobp or vice versa. However, the snake was much faster than the mubobp and could also pull itself away whenever the mubobp got a bit of a grip on the snake. It also probably helped that the snake was introduced to what appeared to be a vase because it did not act like there was another creature in the box until the mubobp had attained enough of a form and color of a snake. The snake appeared more guarded against the mubobp snake form the more its form progressed to a better match to the snake. This took about as long as it does for dralasites to change their form, about twenty minutes. The final form looked and felt almost exactly like the real snake but moved real slow.

Tik then dropped a twig of needles into the box and the mubobp did not respond. We tried getting the mubobp back to the other forms and following them with the twig of needles and even getting the mubobp back to its native form first but never did the mubobp take the form of the twig of needles. Tik then gave us a bit of an anatomy lesson and explained that the mubobp and dralasite muscular physiology cannot form that many appendages and the very small size of the appendages is also impractical. He also referred us to a dralasite medical

library that confirmed that mubobp share the same elasticity traits and physiology as dralasites.

We are now keeping the mubobp in a habitat of stones until we build a dralasite one. We are feeding it crickets from Dwain's supply for reptiles. Dwain put a crystal in the habitat and it matched the crystal form and color but lacked the clarity and was opaque.

We are excited and thankful to have a mubobp here at the preserve and hope Burbel has success in finding the source of the mubobp he acquired. The mubobp had already been in contact with other mubobp spores when Burbel found it. He believes as we do that there must be other mubobp somewhere in the Frontier.

Burbel took the mubobp in trade from an ifshnit merchant who did not know what it was nor its value to dralasites. The ifshnit picked it up from a human thief who had been using it to steel items in the bazaar. He stole a knife from the ifshnits shop by placing it among the knives to make the swap but was prevented from retrieving the mubobp before the shop keep closed the glass cover. By the time the shop keep was persuaded to open the case again the mubobp had formed like another knife in the case and the human did not know which one to pick up. The shop keep grew tired of the human not making a purchase and sent him away. Later the ifshnit emptied the case to move on and later found the mubobp formed as a conglomerate of odd shapes while he was unloading his wares at the next port where Burbel found it.

The human had acquired the mubobp when he snuck aboard a cargo shuttle and filled his bag with whatever he could get his hands on. He discovered the mubobp shape forming ability when he kept finding two of things in his room. He then used it in his thieving the next five weeks.

The cargo ship crew acquired the mubobp when they salvaged a ship orbiting the star of the uninhabitable system between Gruna Garu and Lynchpin. They found several freeze fields full of mubobps and turned them over to the financier who had directed them to the salvage. They traded the salvaged cargo for their pay in the outer reaches of the Gruna Garu system and their mubobp was missed when the crew of the ship they transferred the cargo to moved all the mubobp from the old failing freeze fields to new fresh ones they had brought with them.

The crew of the ship that picked up the cargo of mubobps in Gruna Garu transported them to Dramune for an arranged price to an unknown buyer there. In the

Readers wishing Jurak Hangna to investigate a creature of the frontier need only submit a picture and any details of the creature via FrontierExplorer.org. Submitters must have rights and permission to submit all artwork. Dramune system the freeze fields found their way to a lab where the mubobp were fitted with implanted listening devices, cameras, tracers, and drug implants. This organization has begun placing these mubobp in secured environments such as mega corp offices and activating the drug implants to paralyze the mubobp in the placed form. These mubobp are then used to spy on these locations.

The salvaged ship was one of the many ships lost in the search for the dralasite home world. Apparently this ship had made its way home and had mis-jumped on the return trying to reach Gruna Garu. The mubobp were their proof they had found the dralasite home world.

FE



The 35th Anniversary patches are in and available for order. We made 200 patches this time around and while most of them have already been mailed out to those that pre-ordered them, there are still a number of patches left if you didn't place a pre-order and would still like to get some of them.

If you are interested in ordering one or more patches you have two options. The easiest option is simply to go to <u>http://starfrontiers.info/patch2017.html</u> and hit the "Buy Now" button. This will take you to PayPal where you can select the quantity you want and place your order. If you don't want to order via PayPal, send an e-mail to <u>patches@frontierexplorer.org</u> and let us know how many you would be interested in and we'll work something out.

Order soon because once they're gone...





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2017-01-06-000002 SRM 2017



ENTRY LEVEL ROBOTICS

Drones for Star Frontiers should be considered zero level robots. They require an operator and are capable of only limited autonomous activity.

Drones come in four sizes: micro through large. At time of purchase their mode of locomotion is determined: quad rotor, wheeled, tracked, hover, slither, or aquatic (surface or submersible). Speed is determined by type of locomotion (see table below).

Movement Mode	Speed
Tracked & Submersible	Slow
Wheeled, Hover, aquatic surface & Slither	Medium
Quad rotor	Fast

Slither mode of locomotion is capable of surface swimming but if used that way the drone must conform to the special rule for aquatic drones. All drones with aquatic modes of locomotion must be water proofed. This means a cost increase of 10% for each item of equipment added to the drone and for the drone body. Example: Frollo is purchasing a submersible body drone thus it will cost 110 Cr instead of 100 Cr.

All drones come with basic software, a com unit (for remote control), and basic imaging equipment. The micro drone body has a standard 2D camera and all other drone bodies come with a holocamera standard. The basic software tells the drone how to move and allows it to accept basic instructions to travel to waypoints or destinations and perform specific actions at the operator's direction.

Operating a drone is done with a drone remote using

Body Size	Wt.	STA	Power Source	Operational Life	Spaces	Cost
Micro	n/a	3	mini clip	2hr/SEU	0	25
Light	1kg	5	mini clip	1.5hr/SEU	1	50
Small	5kg	7	20 SEU clip	1hr/SEU	3	100
Medium	15kg	14	20 SEU clip	1hr/SEU	5	200
Large	25kg	25	20 SEU clip	1hr/ 1.5 SEU	10	500

chronocom technology which allows a range of 5 km. A drone may also be operated from a computer with a robot management program and a communication device attached. Operation of drone equipment that requires a skill check (like using weapons) requires robotics skill. This means weapons fired from the drone are resolved using a roboticist skill. If a drone is being fired upon a roboticist making a successful skill check can make the drone attempt to evade. This action gives anyone attacking the drone a -20% to hit modifier for one turn and no other action may be performed by the drone that turn.

Characters without robotics skill may also use a drone as instructing it to move to a destination will not require a skill check. However, any skill check required during drone operation will be at the standard -20% penalty for being unskilled. The exception is using the manipulator arms to perform a skill remotely like a technician repairing equipment or a demolitions expert disarming a bomb.

Operational life for drones is determined by SEU and measured in hours. There is the option to install extra 20 SEU clip for drones using that power source to increase operational life. Each addition 20 SEU clip takes one space in the drone body.

EQUIPPING DRONES

Drones can be equipped with a wide array of equipment and even weapons. Each drone body has a number of spaces for adding equipment. Every kilogram of equipment uses a space. Each item of equipment that weighs less than a kg (in other words is listed as n/a) takes one space in a drone.

The following weapons from the Alpha Dawn equipment list may be add to a drone: electrostunner, laser pistol & rifle, sonic stunner, needler pistol & rifle, gyro-jet pistol

& rifle, and grenades. With the exception of grenades, these weapons cost 25% more. Each grenade uses one space of the drone's total.

NEW EQUIPMENT

AUXILIARY SENSORS

These sensors are individual and must be purchased separately but all cost the same. They can be sonar, olfactory, seismic and etc.

Wt: n/a Cost: 300

Equipment	Weight	Cost
Flashlight	n/a	75
Holo flare	1	5
IR optics	n/a	300
IR jammer	1	500
Toxy-rad gauge	n/a	20
Self destruct charge	1	30
Auxiliary sensors	n/a	300
20 SEU clip	n/a	100
Mini power clip	n/a	50
Manipulator arm	1	50
Rocket mount	1	2000
Rocket	4	15

SELF-DESTRUCT CHARGE

This item is 50 grams of TD-19 explosive and a remote detonator. The explosive charge may be doubled without using another space in the drone body. Note: 50 g of TD-19 has the explosive power of 5d10.

Wt: 1kg **Cost**: 30 Cr.

MINI POWER CLIP

This item comes from Zebulon's Guide and is reprinted here for quick reference. The mini clip is a 10 SEU power source.

Wt: n/a **Cost**: 50 Cr.

MANIPULATOR ARMS

If a drone operator needs to perform a specific skill (like demolitions) through the drone, a pair of manipulator arms will be required. Each arm must be purchased and added separately. Performing a skill remotely is at -10%.

Wt: 1kg **Cost**: 50 Cr.

ROCKET MOUNT

This is a mount for the rocket fired by the rocket launcher on the AD equipment list. One mount may carry up to 2 rockets. Rockets must be purchased separately and since each rocket weighs 4 kg it takes up 4 spaces in addition to the space of the mount. This weapon is exempt to the +25% cost penalty for adding weapons to a drone as it was designed for drones. Even though the rockets are mounted externally the drone loses the ability to use the space because of the weight of the weapon system.

Wt: 1kg **Cost**: 2000 Cr.

DRONE CONTOLLER

This is a hand held remote control device with a holographic interface. If used with drones lacking a holo camera the video data is presented as a 2D presentation.

Wt: 1kg Cost: 250 Cr.

STARTING CHARACTERS AND DRONES

It's a long standing practice to give starting characters a free tool kit at character creation. Instead of giving a starting roboticist a tool kit, a referee could bestow a drone and the drone controller as starting equipment for an entry level roboticist. The Gnat and the Little Mamba or a Courier drone or the Nightingale drone would give a beginning roboticist plenty of opportunity to use his skill and would be invaluable aids to the adventuring party.



SAMPLE DRONES

Name	Specifications	Weight	Cost
The Gnat	Micro drone body, rotor movement	n/a	25 cr.
Nightingale Drone	Light drone body, rotor movement, IR optics	1 kg	350 cr.
D.O.G. (Detecting Olfactory Gyrocopter)	Small drone body, rotor movement, olfactory sensors, 2 holo flares	7 kg	410 cr.
Courier Drone	Light drone body, rotor movement, 1 manipulator arm	2 kg	100 cr.
Demolitions Drone	Medium drone body, tracked movement, 2 manipulator arms, flashlight		350 cr.
Stinger Drone	Large drone body, rotor movement, IR optics, rocket mount, 2 rockets	34 kg	2830 cr.
Mamba Drone	Small drone body, slither movement, 6 self-destruct charges	5 kg	280 cr.
Little Mamba	Light drone body, slither movement, 2 self-destruct charges	1 kg	110 cr.
Little Fish	Small drone body, submersible movement, sonar sensor, 2 manipulator arms	7 kg	540 cr.





Cyborgs are a science fiction staple and while Star Frontiers never introduced them to its setting I decided to make some for my collection. This is a moderate to advanced project requiring files, wire cutters, saws, exacto-knives, a pin vice drill, two part sculpting resin compound (Pro-Create or Green Stuff are two of the name brands I've used), sculpting tools and lots of bits and pieces in your "bitz" box.



Modelling Note: I drill and pin everything possible in metal minis and in this tutorial I simply refer to it as drill and pin. The process is this: I use a pin vice drill and a drill bit that makes a hole big enough for paper clip wire. I glue a long straight piece of paper clip into the first hole leaving it longer than it needs to be. I then hold the next piece against the first and see where the paper clip pin touches the other piece and drill that spot. I dry fit the two pieces, mark the exposed wire pin, measure, and trim it to fit the hole. I dry fit again to confirm a good fit then glue. If a miniature has a knob like protrusion that's intended to function as a pin in the gluing together process I still drill and pin. The reason being is that I've had miniatures not stay together despite high quality super glue but never has a miniature that was drilled and pinned come apart.

THE PIRATE SHE-BORG

I had the following figures. The magician is a freebie given away at a convention that my daughter played at painting. I believe it is from Reaper's Chronoscope line. The robot body came from a bag of Build your own robots by Old Glory:

http://www.oldgloryminiatures.com/proddetail.asp?prod= BMM-144



The bag comes with 13 bodies and huge supply of arms and heads that give you many options to customize your robots. This body was picked because it was almost kind of sexy.



The first step was removing the legs on the magician. I trimmed with wire cutters trying to preserve the tuxedo tails and then used a hobby saw and files to cut her in half at the waist and still keep the tuxedo jacket. This was by far the hardest and trickiest part of this conversion.

(See pictures on next page)

The robot body was then cut in half at the waist and test fitted together and where the fit wasn't good the pieces were filed until they would fit. When I was satisfied with



the fit of the legs to the body, I drilled and pinned the body to the legs.



The cards were trimmed away leaving one that I intended to paint as a smart phone or a tablet computer and the top hat was trimmed away in favor of a Pirate hat. The pirate



hat as it turns out came from a sprue of extra bitz from another Reaper Chronoscope figure but I'm not sure which one. The hat recieved the drill and pin treatment.



At this point I knew that I needed to mix some two part expoxy sculpting compound to hide some of the joints and to finish the base. However, I also would need to do that to the next cyborg figure and decided to delay till he was ready for the sculpting compound.

THE CLAW

The Claw was pieced together with a robot body and an appropriate looking claw arm from my bag of build your own robots. The torso came from Old Glory's Human Bikers:

http://www.oldgloryminiatures.com/proddetail.asp?prod= <u>GRK-15</u>





The body of each biker has the legs, torso and left arm reaching out to grip the motorcycle handle bars. The right arms and heads are on extra sprues and you customize your bikers. I decided the claw would retain his left arm but get a robot claw arm. He was cut at the waist and joined to his robot legs by drill and pin. A biker head was added and a machine pistol form the bitz box was glued into his left hand.

At this point I knew that I would need to fill the shoulder socket of the Claw with sculpting compound before I could drill and pin it. So the figures were glued to the metal bases that I prefer and sculpting compound was applied to the bases, any "cracks" where I had joined pieces together and into the holes in the shoulder sockets of the biker torso and the claw arm. I matched the texture of the miniatures integral bases by pressing an old tooth brush into the sculpting compound.





When the compound set I drilled and pinned the Claw's arm and decided to add a weapon to the Pirate She-borg. Her wrist was bent using needle nose pliers and her hand



was filed until the bitz box machete would fit. I was careful to preserve the "C" shape of the hand so that I could crimp the metal fingers onto the plastic sword since this would not be a drill and pin joint.



THE COMMODORE

The Commodore was made with a Colonial Era steam boat captain (I have no idea which manufacturer but if I

was pressed to say I'd guess Copplestone), legs from a broke piece of spider jewelry (found in the street), and the torso of one of my build your own robot minis.



Once the robot torso piece was glued onto the spider legs and I realized I would need a custom base. Using a piece of plastic intended as a light panel in a drop ceiling I glued and clamped a square to a 1.5 inch washer. When the super glue set I scored the plastic around the washer's edge then broke away the excess plastic carefully with needle nose pliers and then filed the edges smooth.



I drilled a hole at the center of the washer base and bent a paper clip pin to have a spiral at one end. The spiral was made to fit within the hole of the washer and the pin stuck through the drilled hole.



The spider body was glued onto the pin in the base and the ship captain torso was added by drill and pin. Some sculpting compound was used to hide joints and all the figures were primed and painted.







FE

Tom Verreault

Frontiers of Literature

DYSTOPIAN FUTURES

In this issue we'll review three novels presenting dystopian futures. Two are debut novels from new authors, though both are experienced having short story credits or co-writing credits with more established authors. As always we'll evaluate the setting and the adventure for their potential use in an RPG.

First up is "The Courier; A San Angeles Novel" by Gerald Brandt and I'm verv excited about this book and author. His story is a dark future of powerful mega corporations, bought and for governments, paid mercenaries, corporate special ops teams, anticorporation cadres, hackers, satellite cities. megalopolises, and a 17 year old courier at the center of a web of intrigue and



marked for death by rich and powerful forces she doesn't understand. It's tailor made for the Star Frontiers setting.

The California coastline has become dominated by a megalopolis stretching from San Francisco to Los Angeles built up into 7 levels with the rich on top. The novel very carefully gives you a tour of all 7 levels and an understanding of a corporate dominated society. Lots of twists and intrigue kept you guessing and while some minor aspects of the plot were predictable it was a real page turner right down to a satisfying end. It's not a story that goes in for a lot of Sci-fi gadgetry, focusing instead on the characters. Game masters looking to craft an adventure laden with intrigue will find plenty of inspiration with, "The Courier."

Our next debut novel is, "*Impulse*" by David Bara. The planetary societies visited by the characters are not themselves dystopian as they are presented as mostly having their act together. Instead, it is space itself that is dystopian. The setting is that of somewhat advanced societies venturing out into space after a collapse of interstellar society and a past war between the two star nations that are now working together. There is an organization called the Librarians who represent an illdefined church who are the custodians of super magical tech and are shepherding the neo-barbarians back into an interstellar community. The exploration of the setting is a little disjointed and I felt like I couldn't get a good grasp on it. However, the presentation of national militaries working together to build an interstellar military and the associated problems of a mixed service were well presented. The story is decent inspiration for a big ship campaign or an exploration campaign. I did enjoy the aspect of exploration.

The final dystopian future is a blast from the past, "Mathew Swain. Hot Time in Town" bv Mike Old McQuay. This story can be best described as Mike Hammer or Phillip Marlowe meets Star Frontiers. The protagonist is the archetypical hard-boiled detective full of cynicism, keen observations. wit. world-weariness. and despondence. The setting has powerful corporations, mutants, space stations.





corrupt police who only work for hire, nuclear wastes, murder, mystery, and hi-tech prototypes (artifacts in a RPG setting). The story and plot are fairly episodic and as an adventure it would feel like a railroad more than a sandbox.

The series is no longer published but with four books, referees should find plenty of inspiration for running a Star Law campaign in a dysfunctional society where the local police consider the Star Law marshal an interloper and corporate execs believe they are accountable to no one. Even more than this book being an inspiration for a game referee I feel it would be good inspiration for the player looking to craft a hard-boiled detective PC. Search for this one at used bookstores or on-line auction sites.



Date: 14 April, 2733, 1400 hours UT (MJD: 319370.6)

"Approaching planetary orbit now, Captain"

The *R.S.S.* (Republic Space Ship) *Nagasaki* approached the world of Zephyr. Zephyr was an Earth—like world with all types of climates. The population consisted of mainly Humans and Chiluko (a race created by uplifting rats), its main industry was agriculture. It was also known for its mineral deposits that held crystals good for military lasers. It was also in an unincorporated area of the galaxy—between the Terran Republic (TR) and the Peoples' Democratic Socialist Republic (PDSR).

In recent years, Zephyr had opened dialogues with the TR. The planetary government was showing favor towards integration with them. The vote from the planetary population showed 78% favored integration as well.

Ten hours ago, via hypercomm, Zephyr sent an S.O.S. throughout charted space. Zephyr claimed that a PDSR fleet entered the system and were setting up a blockade around their world. The *Nagasaki* did not come alone; she brought a small fleet of military vessels that were near enough to rendezvous with her. The fleet then deployed to the Zephyr System.

As they approached, however, they saw that Zephyr wasn't exaggerating. The sensors station reported at least a dozen contacts—PDSR cruisers, destroyers, and frigates—in a blockade orbit around the planet.



"Helm," the Captain ordered, "parallel our orbit with the PDSR flagship."

"Aye aye, Captain." The helm answered.

Captain Lasseter was a 20-year veteran of the Republic Navy. His short brown hair was in a standard military style. His two meter tall frame was secured in the acceleration couch like the rest of the crew. In front of him, connected to a ceiling arm, was a screen that gave him tactical data, targeting algorithms, and ship status. He observed his vessel running a near-parallel course around the PDSR flagship.

The *Nagasaki* herself was a 20,000 ton (cubic meter) heavy cruiser. It was pickled with sensors and weapons: from missile tubes as well as lasers, particle accelerators, and mid-grade mass drivers. Its antimatter power plant was state of the art. It was capable of achieving warp speeds of Standard x 3 - 3 light years per day. It was the best the Terran Republic had to offer.

The PDSR flagship—The *K.S.S.* (Kosmoflot Space Ship) *Stalin's Pride*, was not as impressive. It was a 20,000 tonner as well, but with more missile tubes and less guns. Its fusion plant was a standard in the PDSR fleet. Its Standard x 2 speed was its best. Nevertheless, *Stalin's Pride* was not a vessel to be disregarded.

"Captain," the ship's Comm Officer said. "The *Stalin's Pride* is hailing us." The Comm Officer, Lieutenant Rikitik, was a male Chiluko. His high-pitched voice still sounded professional. His brown fur was on edge – showing his nervousness. His meter-tall frame was secured in his couch.

"On main screen," Captain Lasseter said. The ship had a main view screen in the front of the bridge, similar to many science fiction stories.

The screen lit up. A human was on the screen. The woman's uniform had the trappings of the ship's Captain.

"This is Captain Romanova of the *K.S.S. Stalin's Pride*," she said. "What is the purpose of your presence?"

"This is Captain Lasseter of the *R.S.S. Nagasaki.*" The Captain replied. "We are responding to an S.O.S. sent from Zephyr about your unwarranted blockade of their planet."

"This is no unjustified blockade," Captain Romanova said, "we responded to the planet's request for aid against terrorist operators on their world. They asked us to come here; any distress you may have received must have been falsified. We are here to assist in their peaceful transition to the Glorious PDSR."

"The distress signal had the proper authorization, coming from the Presidential Office," Captain Lasseter retorted. "It was a cry for help against your aggression."

"Exactly, Republic Captain, it is the President, her cabinet, and the planetary senate whom are the primary terrorists leaders. They do not represent the people; they only represent their own narcissist agendas. The people have spoken; they demanded to be liberated by us. They demanded to be liberated from their capitalistic chains. You are not wanted here. You will depart this system immediately."

"Captain," the Sensor Op, PO2 McPherson, piped up, "I am getting data from the planet's surface. The capitol city is on fire, Sir! I have detected at least two marine divisions down there! I am also getting data that several other cities are burning as well. Troops are still being hotdeployed to Zephyr's surface, Sir!"

"I am getting other radio chatter as well, Sir," Comm said. "I am picking up maydays and other distress messages coming from all over the planet. PDSR troops are rounding up and detaining civilians. Hospitals are filled up and civilian corpses are piling up outside of them. Planetary militia is no match for the PDSR Spetsnaz; they're falling back all over."

"*K.S.S. Stalin's Pride*," The Captain said, angrily, "You have HOW many divisions down there? If the people wanted you so badly, why did you have to level their cities? We have received the polls from Zephyr's population that stated if they wanted to integrate with anyone, they would integrate with the Terran Republic. We are aware of your attacks upon the civilian population. STOP YOUR INVASION NOW!!"

"YOU HAVE NO RIGHT TO INSTRUCT US!" "THIS IS OUR AFFAIR! Romanova velled back. ZEPHYR IS NOT NOW, NOR NEVER BEEN, A PART OF YOUR DECADENT IMPERIALIST **GOVERNMENT!** ZEPHYR IS NOW А PROTECTORATE OF THE PEOPLES' DEMOCRATIC SOCIALIST REPUBLIC! TO INTERFERE WITH OUR LIBERATION OF THIS WORLD WILL BE CONSIDERED AN ACT OF WAR!"

"It is YOU who have committed the act of war here, Captain Romanova," Lasseter answered back. "You have blatantly invaded this planet, and are killing its population. The legitimate government asked for assistance. WITHDRAW NOW!!"

"WE WILL NOT, IMPERIALIST DOG! WE WILL STAY HERE-"

The Captain ordered his Comm Officer to cut the transmission. He then got on the intership comm.

"Attention All Hands," Cpt. Lasseter announced, "This is the Captain speaking: General Quarters! Repeat: General Quarters! All hands to battle stations! Comm, instruct the fleet to do the same!"

The alarm klaxon screamed all over the <u>Nagasaki</u>. Everyone got to their stations within one minute.

"Captain!" Lt. Rikitik said, "All stations report battleready. The fleet reports same status."

"Good," Cpt. Lasseter replied, "Weapons: give me a firing solution on the flagship."

The Weapons Officer, PO1 Warren, started computing his attack upon *Stalin's Pride*. The flagship was too close for proper missile targeting, but the guns were online and tracking the vessel.

"Firing solution achieved on *Stalin's Pride*, Sir!" PO1 Warren said. "Lasers, PA's and Mass Drivers set!"

"Warren, if they so much as flinch, open fire."

"Aye, Sir."

"Captain, PO2 McPherson piped up, "the *Pride* is locking on to us as well."

There are times, in a Ship Captain's career, when one simple decision makes or break it. Captain Lasseter was thinking about this when the Weapons Officer fired on hearing the Sensor Ops report. The readouts showed direct hits from all the guns on the *Pride*. At point blank range, this was typical.

The *Pride* took the hits and did nothing.

"Captain," PO2 McPherson said, "I am getting severely reduced radiation readings from the enemy ship: power plant down, no active sensor scans, not even radio emissions. It looks like ... Captain, I think we killed her."

"Make sure," The Captain replied, "and prepare a firing solution on-"



"Sir!" McPherson interrupted. "We are getting pinged by every enemy ship in range. Energy spikes detected!"

The *Nagasaki* suddenly shuddered. Particle beams and laser fire hit the vessel. The shields lit up with a rainbow of colors.

"Shields down 30%," PO1 Warren reported. "Got firing solution on nearest destroyer. Firing torpedo-5 tubes."

Torpedo-5's were x-ray missiles; they carried xaser focusing crystals, which are powered by the exploding warhead. The xaser mechanism is consumed an instant after the warhead detonation – after the xaser has fired. The torpedoes got into range of the PDSR destroyer, the *Sputnik*, and their beams nearly cut the ship in two.

he PDSR also had weapons like this, however. Even as the *Nagasaki*'s weapons detonated, X-missiles from a PDSR vessel did likewise. Their beams were just as destructive.

The bridge of the *Nagasaki* shuddered. Alarm klaxons sounded the hull breach alert. Captain Lasseter strained against his seat straps; the rest of the bridge crew shared similar effects.

"What do we have left? Can we return fire?" Lasseter asked.

"Damage report coming in, Sir....." Rikitik piped. "Warp core off-line, but batteries are fully holding. We have 50% thrust available. Hull breaches are all over the ship. We still have full weapons."

"Good. Contact the rest of the fleet. Tell them to execute Attack Formation: Epsilon. Warren, give us a target!"

Warren frantically computed a firing solution on a cruiser. Within moments, weapons were free......



The battle raged for six hours. When it was over, the *Nagasaki* was battered, but it still had life in her. The rest of the TR fleet was in decent shape as well. The PDSR fleet, however, lost over two thirds of her vessels; the

remaining blockade ships were running, at full speed, towards the FTL transition point. Their marines still on the planet surface.

"We did it, Sir!" Warren exclaimed. "All we have to do is get them off the planet!"

"Belay that attitude, Warren," Lasseter responded. "We just started a war today. Rikitik, coordinate with the rest of the fleet on damage control. We need to hold here until relieved. Send the casualty report to Command as well."

"Aye, Sir," Rikitik answered.

The war, which would be called The First Interstellar War later, lasted six years. From a skirmish around Zephyr to the Battle of Andropov, the war raged. The aftermath of the war would be interesting times for Terra.....





There are a lot of dice towers out there but they seem to all be based on castle towers. I went looking for a science fiction themed one and couldn't really find anything. And there definitely wasn't anything shaped like a spacecraft. So I decided to create my own.

The picture above shows the model, the unpainted prototype and the final painted version. If you'd be interested in owning your own starship dice tower, they can be ordered from the New Frontier Games website at the following links:

- 3D model files to print your own: http://newfrontiergames.com/node/10
- 3D Printed dice towers: http://newfrontiergames.com/products/3d-objects

The printed towers are available in two sizes: 8.6" and 12" tall, and two styles: the default style pictured above and an alternate style where the ship is poised on the side of the landing pad/dice tray. The ships and trays are available in a variety of colors and since they are individually printed, don't have to be the same color.



"The year is 1987, and NASA launches the last of America's deep-space probes. In a freak mishap, Ranger 3 and its pilot, Captain William "Buck" Rogers, are blown out of their trajectory into an orbit which freezes his life support systems and returns Buck Rogers to Earth... 500 years later..."

It's been 35 years since those words were last spoken to open an episode of Glen Larson/Universal's interpretation of the adventures of Buck Rogers. After two seasons, the show came to a close. Like *Battlestar Galactica* before it, it was too expensive for the ratings it got. Some people were glad to see it go. Others were sad. Very sad. I was one of those.

I loved the charismatic performances of the actors. I loved the humorous, swashbuckling tone. I loved the scheming of Draconian Crown Princess Ardala. I loved Buck's "barbarian" 20th century ways and how they occasionally clashed with his 25th century friends' "enlightened" perspective (Buck turned out to be right more often than he was wrong.)

So I was excited when I heard Andrew E.C. Gaska and Blam! Noir and Dime Novella publishing were bringing Buck back in a three-part series to test the waters for a "Season 3" of the show in book form. The format was the novella, a long story/short novel-length. The author's stated intent was to recreate as precisely as he could, the feel of the TV series in all aspects: dialogue, pacing, tone, etc.

I was excited, but also concerned. It would be difficult, I thought, for the author to avoid "updating" or "reimagining" the material. I've had bad experiences with that on other beloved franchises. In my experience, continuations are very hard to do well. My excitement was therefore tempered by a certain amount of worry.

When I got my first look at the cover, with "Buck Rogers in the 25th Century" in the classic font, and Buck and his laser pistol looking much like the posters I remembered seeing from when I was young, I was happy inside. Maybe it was not the best reason for feeling happy. After all, the book itself might still be bad. But I was still happy.

When I heard the book was finally available, I put down my \$9.99 plus shipping. Perhaps a little steep for a ~130 page book that ultimately I might not like, but to get not only new Buck Rogers, but new *canon* Buck Rogers, I was willing to take that risk. Gaska's contract with the Dille estate (who apparently has the rights back from Universal) stipulates that story is 100% officially a part of the show's timeline.

When the book arrived I tore right into it, and found all my hopes fulfilled. Gaska *knows* Buck Rogers. It opened with a teaser, just like the show. Then there was the narrator's monologue, just like the show. And when the book itself started, it was *just like the show*. Gaska *gets* Buck Rogers.

The dialogue, pacing, and structure took me right back to 1980-81 in front of the TV. I could visualize the action and spot the "recycled" special effects models. I could hear the characters speak and they sounded just like Gil Gerrard and Erin Grey, right down to tones and inflections. There were a couple of places where the



author broke off in asides to give a little background information, but I more or less shook them off almost as "commercial breaks" in the episode.

The story (I won't be too specific because I want you to be able to luxuriate in the Buck Rogers-y goodness) is set after the Season 1 finale "Flight of the War Witch", and revolves around Buck, Wilma, and Princess Ardala all trying to get back into the normal swing of things, or at least what passes for normal for them.

The Terrans go back to Earth. Buck and Wilma go undercover to investigate problems surrounding the harvesting of vital micro-organisms from the sub-surface oceans of the Saturnian moon Enceladus. En route, they pass an isolated penal facility that holds some of the Federal Directorate's worst prisoners, and are almost blown up by its defense forces. When they finally arrive at Enceladus, they wind up confronting some of the darker aspects of the Directorate and 25th century society. (This story dials down the swashbuckling tone in a way that feels more like the pilot/movie than the series, but it's *very* powerful.)

Meanwhile, Ardala returns home to the Draconian throneworld. What she finds and what happens to her there changes her life forever, and puts her on a direct collision course with Earth again. The question she ultimately faces is: is she fit for her role in Draconian society or isn't she. She certainly wants to be, which is where the problem lies.

I want to make note of one thing: Eighties programming had no problem with what today would be called "fanservice" (back then they were "call backs" or "special



guest stars"). A number of characters and story elements from the aired episodes are part of the plot. That may offend the tastes of some readers. For me, it is part of the magic that made this book such a joy to read. Gaska handles it so deftly (as he has done everything else in this project so far) that it never feels excessive. Again, I don't want to spoil anyone, so I'm not going to get specific.

The next two books in the series are "Who Mourns for Theopolus?", and "Through Adversity to the Stars". I am simply bouncing inside with eagerness to read them, and then (hopefully) on to Season 3.

You can check out this book on Amazon at <u>https://www.amazon.com/Buck-Rogers-25th-Century-</u> Draconian/dp/152371249X



SUBMIT CONTENT FOR THE FRONTIER EXPLORER

Do you like what you see in the Frontier Explorer? Do you have ideas of your own that you would like to share with the community? Has something from this or a previous issue inspired something for your game and you'd like to tell the world? We would love to help you.

The Frontier Explorer is always looking for submissions and articles from new authors. We are open to submissions of art and articles on any topic from adventures to character sketches to locations to background information to new rules to whatever else you can think of. The only requirement is that it should be science fiction related. While most of our content is focused on the Star Frontiers role playing game, it doesn't have to be that way. We'd love to see articles related to other game systems as well. The more variety, the more inspiration for everyone. In addition to articles, we would love to have more art to include with the articles. If you have general SF related art you'd like to submit, that would be wonderful. If you would be interested in creating images for specific articles or stories, we'd love to work with you to get you early access to upcoming articles that you could illustrate.

If you have material you would like to publish we would love to help you get it ready and into a future issue of the Frontier Explorer. To submit material all you have to do is jump on over to the Frontier Explorer website and hit the big, gold "Submit New Content" button. Or if you'd like to talk to the editors about your ideas first, feel free to drop us a line at editors@frontierexplorer.org and we would be happy to discuss it with you before submission.

Always keep exploring!





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2017-01-07-000003 2017 SRM