Featured Article:

Variable Stars and Dwarfs: An Overview for Non-Astronomers

by Mark McCabe

A Note About Production

Freelance Traveller is prepared using Microsoft Office Publisher 2010 running on a Windows 7 Ultimate x64 system. The program is reasonably easy to use, and produces good results with moderate effort; it also supports advanced typographic features such as typographic quotes and apostrophes, small caps, ligatures, swashes, and stylistic alternatives (if the advanced features are implemented in the font). Generation of the PDF files is built in to this version of Microsoft Office; no additional products are needed.

The title and heading typeface is ZapfHumanist BT, a Bitstream adaptation of Hermann Zapf's digital redesign of his 'hot lead' typeface Optima, chosen as a 'tie-back' to the title typeface of the original edition of *Traveller*. The black-and-orange of the section headings is also a tie-back to *Traveller*'s origins, though we felt that the 'correct' red was too dark. The heading sizes vary from 12 to 16 points. Body text is set in Palatino Linotype, also designed by Hermann Zapf, and is set at 11 points for most body text, giving approximately the same text spacing as Times New Roman at 12 point (which was the original *Freelance Traveller* body text), but a lighter 'color'. Palatino Linotype also 'balances' better as a body text typeface to Optima as a titling typeface.

Contents

From the Editor

TravellerCon/USA 2015 is a mere three months away. Your Humble Editor is nominally responsible for some of the promotion thereof, though this spring he's been somewhat remiss—real life *does* get in the way, sometimes. Nevertheless, it *is* happening, and we *do* want you to come.

One obstacle to previous growth has been that our arrangements with the old site didn't really allow for gradual growth—and we had really hit the limit to what we could do without raising the cost to an untenable level. The current site offers us a bit more flexibility for future growth. However, to actually manage that growth, we need a few things: First, we need to see that there's increasing interest in the con in its current form. The best way to show that is to come—pre-registration is open now (see the Con website at http://www.travellercon-usa.com/)—and to get friends to come as well. Second, we need to know what you'd like to see in an expanded con. We've had a few ideas mentioned in passing; what we need is some more concrete eluci-dation of those ideas, including some of the imple-mentation details—for example, if you want panel discussions, we'd want to know on what topics, who you think should be on the panel(s), and how (and at what cost) we should induce the panelists to come. If you want to see awards of some sort given out, what sort of awards (both in the sense of 'for what' and 'what is the nature of the symbol—and at what cost—of the award') should we be looking at. Con-branded swag? Of what sort, and how much would you be willing to pay? Named guests-of-honor? Who? Why? How do we induce them to come? What's in it for them? Other ideas? Tell us about them; use *Freelance Traveller*'s feedback ad-dress (feedback@freelancetraveller.com—use a sub-ject line indicating Con ideas), and we'll pass them on to the rest of the ConCom. Finally, we want to know what you'd like to see in the Con at its *present* size. Currently, the focus is 'sit at a table and roll dice' gaming; is there anything you can think of that we're missing for a small (30-odd people) con? Let us know, also via *Freelance Traveller*'s feedback. ✦

Clement Sector

Reviewed by Megan Robertson

This review originally appeared on http://rpg-resource.org.uk in November 2014 and is reprinted here with permission

This book presents an 'alternate' *Traveller* Universe setting, in which Gypsy Knights Games's material is set. It's an area of space on the far side of the galaxy from Earth, initially reached via a worm hole. The year is 2342, which makes the setting somewhat closer to *2300AD* than most conventional *Traveller* settings. One of the chief differences is that the people you encounter still often feel connections and trace their roots back to a particular part of Earth.

There's a lot to take in, beginning with the history of the Sector starting with the middle of the 21st century and explaining how the peoples of Earth explored first their own solar system and then went further afield, spurred on by the development of the Zimm Drive, which is based on quantum entanglement. In a way this is a primitive 'Jump Drive', taking ships out of normal space for a period of time and reinserting them a considerable distance away, some 2 parsecs, and leading to the colonisation of several relatively local star systems... and eventually to the discovery of the worm hole that led to the worlds of the Clement Sector. Over the next couple of centuries the area began to be explored and colonies established on suitable planets... and then one day the worm hole collapsed. The people in Clement Sector were now on their own.

This then leads into a detailed gazetteer of the entire sector, with charts and descriptions of every system, colonised or not. There's a lot of relatively unexplored real estate out there if exploration and colonisation interests you. For those areas which have been colonised, more copious details are found in the relevant sourcebook in this series, although there are brief notes here.
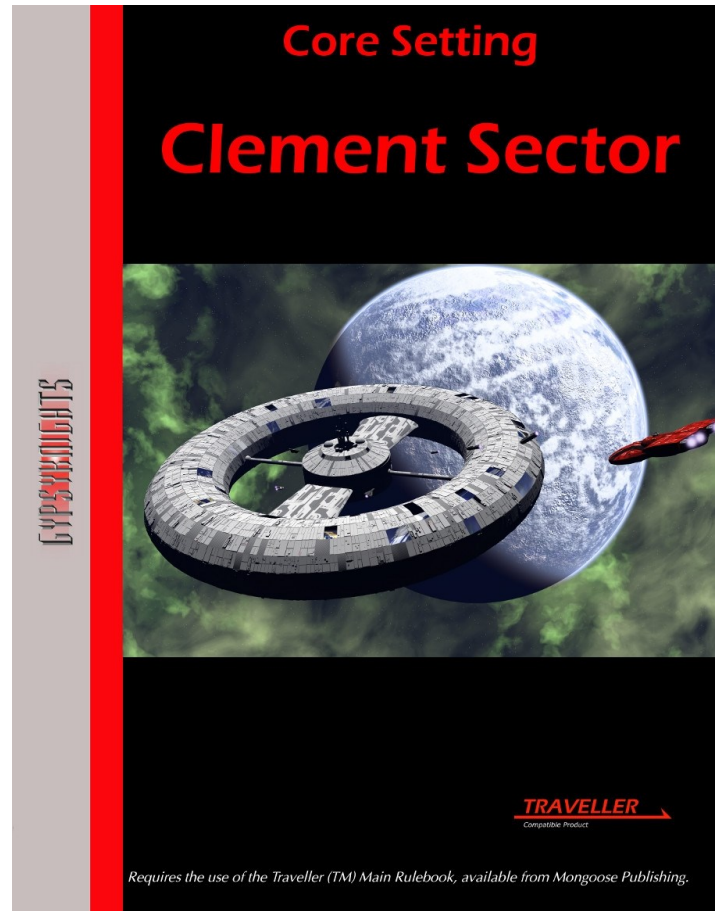
Next comes a section on character generation. One thing to note is that, apart from one called the Hub Federation, there are no interstellar governments—so anyone wanting to have government employment (including military service) in their background needs to decide which government they worked for! Most of the regular *Traveller* careers are available in some form, however. It is useful to determine a homeworld, and there are tables to do this if you prefer it to be random rather than by choice. Earth is included, as the worm hole did not collapse that long ago! This leads in to the allocation of background skills, including a range of survival skills depending on the sort of world the character grew up on.

For those wishing to enter the service of the Hub Federation there are notes on careers in the Navy (more details of this and other Hub Federation-specific careers are in the relevant sourcebooks), and there is also the option of entering the Cascadia Colonisation Authority. Otherwise, you can use most

anything in the main *Traveller* rulebook. Another option is the Colonist career. Background information is provided to set the scene for these new careers.

Next come sections on technology and equipment, which are naturally somewhat different from standard *Traveller* although there is plenty of overlap and scope for using regular items in your game. Tech levels are generally around 10-11 with a cap at 12. This leads into starship design along with several specimens you can use, complete with illustrations, game statistics and plans.

Once we have the ships, there follows a section on starship operation, looking at everything from making a landing planetside to travelling across the sector. The discussion is wide-ranging, dealing with matters such as time and currency on the worlds you might visit as well as the nuts and bolts of using the Zimm drive to get around. Refuelling and piracy are also covered.

The next section looks at some of the larger and more significant corporations that may be encountered, names in the news, employers, suppliers, whatever interaction becomes necessary. There are plenty of plot seeds if you read the notes on each one carefully! Several organisations are given similar treatment (including a helpful bunch called the Gypsy Knights with a strangely familiar logo!).

The book ends with discussions on politics, religion and aliens. The politics in particular is expanded upon in other sourcebooks but it is a useful overview, particularly for those of worlds other than the ones you come from or know well. Finally there are suggestions for the type(s) of campaign you may wish to run in the Clement Sector… there's wide scope here for whatever you might have in mind.

This is a beautifully-constructed and fascinating corner of space which is well worth exploring! ✜

The Lab Ship

Variable Stars and Dwarfs: An Overview For Non-Astronomers

by Mark McCabe

As many of us who have studied stellar masses know, each star can have its own special characteristics that make it as unique as a fingerprint. For example, our own sun can be considered a stellar variant due to cycles of sunspots and stellar ejecta that emanate from the sun's surface.

With that in mind, I went about looking at other types of variables and found a wide variety listed. Some of the better known types are as follows:

Alpha Cygni (α Cyg) variables are non-radial pulsating variables of spectral type B or A and luminosity class Ia. Due to their immense size and high luminosity, one can expect to see periodic rapid increases of EMP (Electromagnetic Pulses) and intense radiation, ranging from 5-30 days in length. The 'non-radial pulsating variable' description means that one area of this star can be expanding while another side may be shrinking. Deneb (α Cyg, type A2Ia) is the prototypical example of this star type. Inhabited planets orbiting α Cyg variables would likely have "hardened" subsurface habitats with heavily shielded local communications, and transiting starships would use microwave beacons and masers for communications with the world(s).

Beta Cephei (β Cep) variables are rapidly pulsating variables of spectral type B0-B2 and luminosity class III-V. Their variability is a function of changes in radius driven by the opacity of the stellar atmosphere to the star's own radiation (the "κ-mechanism" or "kappa mechanism"). Most κ-mechanism variables display higher than normal levels of ionized hydrogen and helium in their spectra; β Cep variables are driven by high levels of iron in the depths of the star, causing spherical contraction and pressure build-up until expansion back to the original shape. One would expect occasional dis-

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ruption of non-protected communications when the star contracts.

Cepheid variables are radial pulsating variables of spectral type F, G or occasionally "hot" K, and luminosity class Ia-III. Their most notable feature is a nearly lockstep relationship between the period and absolute magnitude, allowing them to be used for accurately determining distances on interstellar and intergalactic scales. For 2-40 days this star ejects positively ionized Helium particles. The star increases in luminosity during this time. Expect an increase in the solar winds while these ions emanate from the star. Because this ejecta is helium-based, most planets with even a trace atmosphere will be unaffected. The first such Cepheid variable discovered was Eta Aquilae (η Aql) in 1784, but the class was named after Delta Cephei (δ Cep).

Flare stars are eruptive variables, mostly of spectral types K (cooler end) and M, luminosity class V (the "red dwarf" stars on the Main Sequence). As with solar flares, the flares on this type of star are caused by magnetic buildup and subsequent "reconnection" in the stellar atmosphere, causing an almost epileptic shaking of its outer surface and erratic bursts of thermal and radioactive energy in irregular patterns. Examples of flare stars include Barnard's Star, Proxima Centauri and Wolf 359. Expect a radically changing solar wind in these system and most settlements will need to be underground or shielded in some fashion.

Mira variables, or **Omicron Ceti** (o Ceti) variables are red giants (spectral class M, luminosity class II-IV) that have evolved off the Main Sequence and onto the Asymptotic Giant Branch of the of the H-R diagram. As the star heads towards the final stages if its existence, it ejects elements ranging from Helium to oxygen for 50 – 550 days. These free-ranging elements may form small planetary nebulas as they get blown away from the star and begin to interact with other stellar and planetary bodies. This type of variable is named after the star Mira (o Ceti) in the constellation Cetus. Any planets attendant on a variable of this type will have formerly been outer planets of a Main Sequence star, and as such will probably not have more than outposts or resource acquisition (e.g. mining) stations.

RR Lyrae variables are low-mass Population II stars of spectral type A (or "hot" F) and luminosity class III. Their variability mechanism is similar to that of the δ Cep variables, and they are similarly used for establishing interstellar distances, for relatively near objects. From 1 to 6 days this star ejects ionized Helium and greatly increases in luminosity. These stars are generally in multiple-star systems and in globular clusters. This type of star is named after the first such variable found (RR Lyrae). Settlements in these systems will need protection from a searing increase of light and radiation of some sort.

RV Tauri variables differ from the otherwise similar Cepheid variables in that the spectral type of RV Tauri change from F or G at the brightest to K or M at their dimmest. They also exhibit alternating primary and secondary minima at their fundamental period, with the interval between the two primary minima (or two secondary minima) being twice the fundamental period. Over its period, the star greatly varies in luminosity due to a rapid expansion and deflation of its diameter. Severe stellar flares, with their attendant disruption of communications, will be common. Planets with weak or nonexistent magnetic fields will experience high radiation. Settlements in any habitable zones will need to have a safe haven underground.

Semiregular variables exhibit significant variation in their cycles, often resolving on analysis to multiple overlapping periods. The majority of these stars are of spectral type M, S, or C, and luminosity class Ia to III, but one of the four subclasses (SRD, exemplified by SV Ursae Majoris) is of spectral type F, G, or K. All subclasses may have mean periods ranging from approximately a month to several thousand days. Subclass SRA stars (exemplified by Z Aquarii) are essentially the same as o Ceti variables, except that where o Ceti stars pulsate in the

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fundamental period, SRA stars pulsate in a harmonic or "overtone" mode. Subclass SRB stars (exemplified by RR Coronae Borealis) may not show any significant periodicity, and some are known to have stopped varying for a length of time, and others have been shown to have multiple overlapping variation periods. Subclass SRC stars are supergiants (luminosity class Ia or Ib) with variability over only about 1 magnitude. An example of this type is Betelgeuse (Alpha Orionis [α Ori], M2Iab).

T Tauri variables are aperiodic variable protostars in the process of contracting to the Main Sequence. They are low-mass (less than $3M_{sol}$) protostars of spectral type F, G, K, or M. These are stars that gain and lose luminosity rapidly in a stellar nursery, with gravitational contraction being the driving mechanism (as they are yet too cool to sustain fusion). They have up to a thousand times more sunspots than a normal star and they will sometimes eject energy and stellar ejecta in jets coming out of both poles. These stars also eject Lithium at a much higher rate than most stars. Wildly chaotic in the extreme, any sustained life in these systems will be difficult at best.

Wolf-Rayet stars are eruptive variables of spectral type O and luminosity class Ia or Ib, but because of their unique characteristics (including strong emission lines), they have been given their own classification as type W (with several subtypes). This type of variable is an aging type O star that has blown off much of its outer surface. The hydrogen is gone and it is now using helium as fuel (or something heavier). This is a classic example of a live fast, die young star – any planets in this system will be blasted or well out in the outer zones. The inner zones will likely be covered in the ejected hydrogen as a thin nebula has formed like a globe surrounding the star. An adventurous starship captain may be able to skim this hydrogen, but that ship will need to be mindful of the radiation and solar winds coming from a dying beast of a star. The characteristics of type W stars are such that most are expected to finally die as supernovae. The first types of these stars were discovered by Charles Wolf and Georges Rayet in the constellation Cygnus in 1867.

Generating Variable Stars

Variable stars should only be placed by referee fiat, but an appropriate type of variable can explain why a world with a UWP characteristic of a highly-

Variable Stars: Summary Descriptions		
Type	**H-R classification**	**Effects/duration**
α Cyg	B-A/Ia only	5d6 days of intense radiation and EMP
β Cep	B0-B2/III to V	Wide variance on pulsation
Cepheids	F-G/I to III	2d20 day duration – ejects He+
Flare Stars	K and M/V	Erratic radiation and thermal outbursts
o Ceti	M/II to IV	50×2d6-1 days duration – ejects He – C
RR Lyrae	A/III	d6 day duration – ejects ionized He
RV Tauri	F-G to K-M/Ib or II	3d20+30 days duration; spectral classification changes over period.
Semi-Regular Variables		
SRA (Z Aquarii)	M/II to IV	As o Ceti, but vary in harmonic or "overtone" instead of fundamental period.
SRB (RR Coronae Borealis)	M, S, or C/Ia to III	Highly variable, ranging from temporary/long-term nonvariation to multiple overlapping periods.
SRC (α Ori)	M, S, C/Ia to III	Variability over ~1 magnitude
SRD (SV Ursae Majoris)	F, G, or K types	60×d10 days duration
T Tauri	F-M protostars	Gravitational contraction, not fusion
Wolf-Rayet	O/Ia and O/Ib	Nebula surrounding inner zone, chaotic system, probably Amber or Red Zone

desirable world might have a low population. Use the existing stellar type (but see the Revised Stellar Classifications and Dwarf Classification sections below) to determine where on the table below to roll to determine the type of variable.

Chance of Variables (for *Traveller* star system generation)			
Stellar Type	**Chance of variance**	**Type of variable star**	
O/Ia and O/Ib	28% (9+:2d6)	Wolf-Rayet stars (reclassify as a type W)	
B0-B2/III to V	28% (9+:2d6)	β Cep	
B/Ia and A/Ia	28% (9+:2d6)	α Cyg	
A (any luminosity)	17% (10+:2d6)	RR Lyrae	
F/I to III	8% (11+: 2d6)	d6: 1-2 3-4 5-6	Cepheid, RV Tauri, SRD
F (any)	3% (12:2d6)	d6: 1-3 4-6	RV Tauri, SRD
G/I to III	8% (11+:2D6)	d6: 1-2 3-4 5-6	Cepheid, RV Tauri, SRD
G (any)	3% (12:2d6)	d6: 1-3 4-6	RV Tauri, SRD
K	3% (12:2d6)	d6: 1-3 4-6	Flare, SRD
M/Ia, M/Ib, M/II-III	8% (11+:2d6)	d6: 1-3 4-6	SRB SRC
M/II to IV	28% (9+:2d6)	2d6: 2-5 6-8 9-10 11-12	o Ceti, SRA, Type S, Type C
M/V	28% (9+: 2d6)	d6: 1-3 4-5 6	Type L, Type T, Type Y

Extended Classifications for Dying Stars

Since the writing of Classic *Traveller Book 6: Scouts*, the stellar classification system has been updated and extended. Thanks to the Hubble and Kepler telescopes, along with a better understanding of how stars work, the catalog has expanded to include star types L, T, Y, S and C. This is by no means the end of the classification, but I will stay with these types as they are the most common.

The stars under the L, T and Y spectral classes are commonly referred to as Brown Dwarfs. These are M/V and M/VI stars that have cooled off over time (stars of spectral class M7V or M7VI or cooler are also considered Brown Dwarfs). They still are hot enough to be gaseous and emissive, so approaching them is impossible. Such Brown Dwarfs will progress from type M through L, T, and Y in that order as they cool; the lowest-mass type Y stars have little to distinguish them from the highest-mass jovian planets. All the surviving planets that may still be surrounding these burned-out stars will be considered in the outer zone; the only heat would come from tectonics affected by a larger planet (such as Jupiter's gravity affects the moon Io). These essentially are massive obstacles in space for any traveler, but their gravity is strong enough to have some gravitational effects on hyperdrives.

L	Brown Dwarf	1300K-2400K
T	Methane Dwarfs	700K-1300K
Y	Sub-Brown Dwarf	Less than 700K

The H-R types C and S (together called, informally, 'carbon stars') are used to identify those Red stars (Type M) nearing the end of their main life-cycle. Not to be grouped with the regular variables, this is a special type of star to be used very sparingly by any GM.

Type S Giants (luminosity Ia, Ib, or II) emit a combination of carbon and oxygen (or carbon monoxide) from a star that is acting like a o Ceti variable. Solar winds will be intense and any settlements that may have been here for millennia will likely need to be relocated – and soon.

Type C stars are either Giants or main sequence stars (luminosity III-V) that emit carbon. The hydrogen and the helium are gone. They should again be treated as a o Ceti variables, but with half to a quarter of the time listed. As above, any settlements/civilizations that are in the vicinity of this star should be exiting the system as absolutely soon as possible.

Dwarf Classification

Earlier in this article, stars of spectral type M and the cooler end of K and luminosity class V or VI were referred to as "red dwarfs". These stars are part

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of the Main Sequence, and represent stars at the end of their life that are insufficiently massive to expand into giants. There is a separate area on the H-R diagram for "white dwarfs" (whose spectral "color" extends from spectral type B to K), which are typed with the Dx nomenclature – but the x does not represent the spectral type (*Book 6: Scouts* errs in this); rather, it represents the composition of the outer layers of the star's atmosphere. The 'D' classification stands for 'degenerate', rather than 'dwarf', and stars in this class are no longer undergoing fusion; their temperature is sustained by gravitational collapse. Change stars of type DG, DK, or DM to the appropriate spectral type and luminosity class V (Main Sequence dwarf) or VI (subdwarf; can also be prefixed 'sd', i.e., G5VI and sdG5 are equivalent); stars of type DB, DA, and DF should be changed to DB2, DB5, or DB8 respectively (DB is a type for helium-rich white dwarfs; the number indicates the effective temperature, with higher numbers indicating cooler stars).

Summary

For those of us who like a little science with our storytelling I hope this can add a twist or two to your colonies or to those intrepid scouts who are conducting system surveys. I hope you can find this information useful as I have.

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    http://en.wikipedia.org/wiki/Stellar_classification
    (and other Wikipedia pages on linked from these articles) ✪

Confessions of a Newbie Referee   Timothy Collinson

#15: Why Make it Hard?

As I write this, I'm in that once-a-year week when I'm both excited about *Traveller* and terrified about it as well. It's just seven days now until TravCon 2015 and the annual pilgrimage to a small hotel on the old A1. It will be exciting to see old friends again, catch up, hang out in the bar, and of course play *Traveller*. It will be exciting to run an adventure once again – I'm obviously still new enough at it that it gets the adrenalin pumping.

But I don't help myself. Three years ago, just running an adventure was scary enough; two years ago, that clearly wasn't sufficient, and back with my second adventure, I made it a bit more complicated by adding some live action elements; last year, I upped the ante again, and tried running two different adventures – neither of which was as fully developed as the first two had been – just to see how *that* felt. This year, I've clearly decided that even that wasn't enough excitement, and so I'm trying both an experimental format (using *Supplement 12: Dynasty* as a departure point) and attempting to link two different games together so that the players of one game will meet the players of another game some three quarters of the way through – rather than just being introduced to another bunch of NPCs. This raises the complexity level yet another notch as I try to develop an idea where this will work, liaise with another referee who has gamely agreed to join the insanity, fret over whether I have too much material or too little material, and try to estimate how 'secret' this can be kept. No wonder I'm beginning to have sleepless nights.

Of course, by this time next week, I'll know how it all went and be licking my wounds or basking in the delight of having entertained a few more players for one more year – or judging by last year, a bit of both. But at this point I could wish that I'd just decided to have a break this time round.

Confessions of a Newbie Referee

Writing at this juncture however, gives me pause to reflect on why exactly I put myself through this. It's not dissimilar to other public speaking or 'performances' I sometimes undergo – from lecturing students to the odd drumming gig. Presumably there is something about the adrenalin rush; presumably because "it's there" (or at least it is once I've had the idea); presumably because at some point over the next week I'll remember that it is fun: hopefully for the players, certainly for me. But mainly, it's the challenge: Stretching the creativity muscles, testing the writing-to-a-deadline waters, wanting to do the very best for players who take the chance on picking your adventure when it might be a load of rubbish and a waste of four hours. They put their (characters') lives in your hands! Some stress helps us to achieve more than we might otherwise, but all the same, I'll look forward to sleeping well Sunday night.   ✪

Multimedia Gallery

Starport Places Visualized: Captains' Guildhouse Suite

Images by Jeff Zeitlin

Multimedia Gallery

This series of pictures is a visualization of the example suite presented in *21 Starport Places*. It can double as a suite in a hostel for members of the Travellers' Aid Society in settings compatible with the Official *Traveller* Universe, or as a luxury hotel suite in any setting. As with previous visualizations, the basic look is compatible with *Traveller* tech levels around TL8, due to the author/artist's esthetic sensibilities and the limitations of his skill and the tools available to him.

Multimedia Gallery

Page 8: Plan view of the suite. This matches the plan given in *21 Starport Places*.

Page 9: Top, a view of the main area of the living room from the entry to the suite. Bottom, a view of the entry across the living room, taken from the bedroom door. The living room has three distinct areas: The central entertainment area, where a 2V screen/3V "tank" is often the focus of attention; a conversation nook to the left of the entryway as you enter from the hall, and a wet bar to the right of the entryway. Where a wet bar is made inappropriate by local law, it may be replaced by a mini-kitchen or a duplicate of the conversation nook.

Page 10: Top, the central entertainment area of the living room, seen from the door to the bedroom. Bottom, a view of the central entertainment area from the conversation nook. Note that the writing desk even has a light beneath for the inevitable dropping of a pen...

Multimedia Gallery

Page 11: Top, entering the bedroom from the living room. The same decorative motif is continued here, giving the suite a unified look that enhances the impression of luxury, even though it's not ornate. Bottom, looking across the bedroom at the 'fresher room door from the living room door. Not shown in these pictures (but shown on the next page) is the 2V/3V display, identical to the one in the living room. Ex-cept for the two chairs at the writing desks, all of the chairs in the suite are fully-adjustable recliners, with built-in heating, cooling, and massage capabilities.

(Not shown in this set of pictures is the massage room to the immediate left of the suite entrance or the guest fresher immediately to the right.)

Page 12: Top, standing at the 'fresher room door looking across the bedroom at the 2V/3V display, a duplicate of the one in the living room. Bottom, looking across the bedroom from the 2V/3V viewing chair at the writing desk. Like the one in the living room, there's a light underneath to make it easier to see the inevitable dropped pen.

It should be noted that this 'look' isn't standardized; merely not atypical. Other places may have other esthetics, and the suites in those places will often reflect that, though without compromising on the unified look and luxurious impression.

Multimedia Gallery

Page 13: The 'fresher continues the theme of luxury. Though essentially undecorated, the sheer size and separation of facilities goes far to present the idea of luxury. The tiling on the walls and floor is not the usual glazed ceramic, but carefully polished stone (the floor has an additional no-slip coating); the tub is faced and lined in stone (and also coated against slippage) and has water jets built-in, and the surface of the sink/vanity is also a single slab of stone. Guest supplies (towels,

soap, etc.—even shrink-wrapped toothbrushes and toothpaste) are stored in the vanity.

Top, looking at the vanity from the bedroom door. The tinted glass door to the right sets off the shower, and can be frosted or opaqued. Bottom, looking at the bedroom door and one of the two closets for guest use (the second is set directly opposite the one shown). Both closets have mirrored doors to aid the guest in looking his or her best.
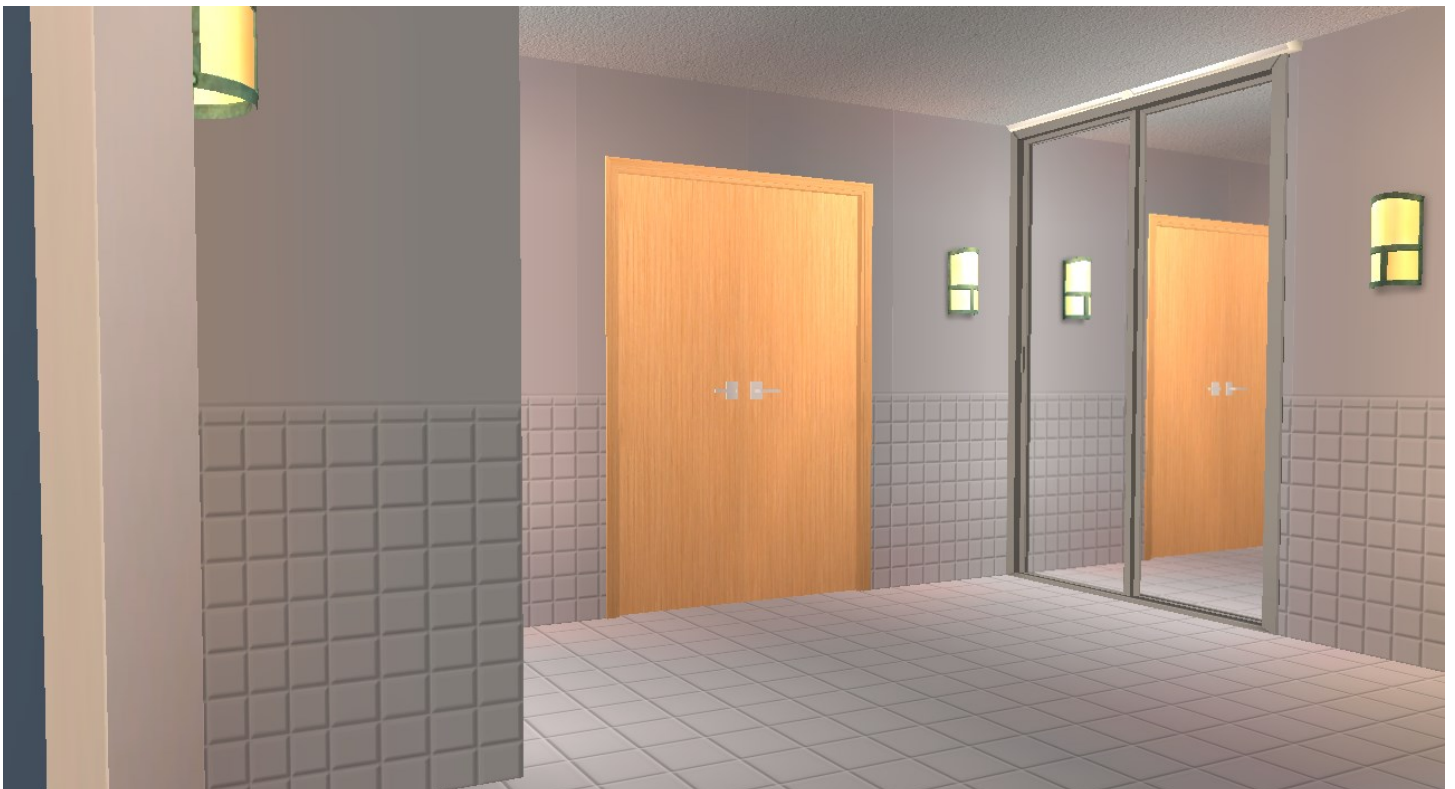
Multimedia Gallery

Page 14: Top, looking at the shower from the tub. In addition to a 'conventional' shower head, the entire ceiling (including the light fixture!) can be used as a 'rainstorm' shower. Bottom, looking at the tub from the shower. The door to the immediate left of the tub in the picture leads to the toilet.

A Compact Model

by Andrea Vallance

Part 4

210th of 2029 (036-98): The bridge of Raledenet

Afira

We sat waiting. Even I could feel Sakuya trembling next to me. I was staring at the agent, "I assure you, *kaptan*, I mean no harm to you or your *ami*. I just want Lord Trace."

"You know they'll execute him, kill him." I could hear Siish's contempt.

"Not my decision or concern, *kaptan*, just doing my job."

Sakuya tried to get closer to me, he was terrified. I slowly lowered one arm. Agent Vu said nothing. I put it around Sakuya and drew him to me. Vu looked at me but again said nothing.

Jane looked at him. "You're Sesheryn; you should be ashamed, you know[32]."

He focused on her. "Just my job, *Wa*." I could hear a slight hint of something, regret; guilt maybe. "I'll be gone as soon as my colleagues return with your *dokhtor*, unharmed, I assure you."

I saw her out of the corner of my eye; I heard her voice, sweet and melodic "I think, Vu *Lul*, you might want to put the gun down."

Agent Vu

Agent Vu smiled as he turned slightly, one eye on his prisoners, one on Isabella, the snub carbine pointed straight at him. He noticed her pistol. The delicate weapon drew his attention to what he thought one of her more attractive features. "So glad you could come. I was so looking forward to seeing you again, Manish *Wa*."

Afira

What the hell was going on? There was so much to take in. We were all dead, of course. If Vu didn't kill us, Isabella certainly would when she fired. She was standing there, pointing a c5 at a trained killer,

and she'd stuck her pistol *there*! I'd have to run over the safety rules with her again. I wondered how she got it to stay there. It's not like The Mother had been overly generous with her in that regard, perhaps a tiny bit on the frugal side in fact. And that voice, like some giggling schoolgirl. She was flirting with him! And then there was the whole 'Manish *Wa*' thing, not only had they obviously met, but he called her 'Manish *Wa*'. 'Confused' didn't quite cover it.

Agent Vu

Isabella smiled sweetly. "I am so sorry I'm late, Vu *Lul*, unavoidably detained. I'm afraid your 'friends' will be unable to join us." Her voice never lost its pleasant tone, but the way she said 'friends' left nobody in any doubt as to her opinions of them.

"It's quite alright, Manish *Wa*, I'm sorry too. But it would appear we're facing a conundrum."

She returned his smile, "So it would, Vu *Lul*."

"I *could* start shooting, Manish *Wa*, with great regret, of course."

Isabella didn't flinch. "If your finger so much as twitches, I'll blow your head off. With great regret, of course, Vu *Lul*." Her mouth formed a mischievous grin. "I'm told I'm quite lethal with this."

Agent Vu considered her, her voice was nothing but sweet and innocent, but her hands were unwavering and the look in her eyes, grim determination. She had the drop on him. He slowly lowered his gun and placed it on the floor. "It would seem I am at your mercy, Manish *Wa*."

Afira

I sat there mouth wide; she done it! He'd blinked. Ariaryn stood, walked over and retrieved Vu's SMG and pistol. He covered Vu and indicated he should sit, hands on head. It was only when Vu was sitting that he spoke to Isabella: "Could you please put that down, very, very gently."

Isabella carefully placed the carbine on the ground. Agent Vu looked puzzled. "I thought she was lethal with that?"

Raconteurs' Rest

I chuckled; yes, she was; there was absolutely no way of knowing where the bullets would end up: lethal to anyone around her.

212th of 2029 (038-98): Askiafant War Memorial

Paperwork. Nobody likes paperwork and a dead body can generate a lot of paperwork. A whole day's worth of forms, interviews, reports and investigations. Naturally, no blame attached to any of us, especially Isabella, just innocent victims defending ourselves. It probably helped that the dead body turned out to be a criminal fugitive. But still we had to do the paperwork.

I wanted to talk with Isabella. Nobody seemed to know where she was; she'd left Sakuya with Jane and Ariaryn. The poor boy was utterly beside himself now, scared to be alone, terrified the Imperium would come for him again. Still, that would have to wait, I wanted to talk with Isabella. Not only did I have a lot of questions, it's never easy to kill somebody, especially for the first time. Siish told me where she'd be: Askiafant, at the memorial. I'd asked what the hell she was doing there. He'd said 'hiding'.

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It took over an hour to get from Daramm Up to Askiafant, a small town near the Manish estates. That, at least, made sense; this would have been where she'd spent the war. I stood before the transparent dome, a cold granite monolith before it carved with one *sesherin* for each of the dead[33], one hundred and ninety three in all. I said a prayer and entered. There had been a school here, once; now, it was a twisted and charred ruin, preserved to remember those who died. To remind us of the price we paid. She was just standing there. I waited a moment then coughed. She turned. "Siish said you'd be here."

"I come here, sometimes, to think."

"Did you know any of them?"

She sounded a little annoyed. "I knew most of them. They were my friends."

I looked down, a little ashamed. "I'm sorry."

"It's okay; I'm sorry, too."

"*Are* you okay, Isabella?"

"Okay?" I think she knew what I meant.

"You killed somebody. That can be kind of hard."

She laughed. "Not sure. I'd have thought I'd have felt something. I didn't feel anything, really. I *should* have felt something. Have you ever?"

"Killed somebody? Yes." It seemed far away, but in the raiders, sometimes ground parties were needed.

"How did *you* feel, the first time?"

"At the time, I didn't have *time* to feel. But afterwards I cried; I guess guilty." I looked at her, it didn't seem to help. "If it helps any, he was a wanted criminal. A rapist, apparently."

She sounded a little distant. "Yes, he was. I should have felt *something*."

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She stood awhile, lost in thought. "Isabella?"

She snapped back to the present. "Yes?"

"'Manish *Wa*?'"

She chuckled. "I seem to remember saying the Manish's were good to me. Nashu once told Madam Sherin she should be proud to have me as a daughter. And she meant it."

It was odd to hear somebody call Siish's mother Nashu. "They adopted you?" Isabella nodded. "Why didn't you tell us?"

"Would it have changed how you saw me?"

I was confused and perhaps a little annoyed; it seemed important information. "Yes, probably."

She grinned slightly, "Then I was probably right not to tell you."

There were other questions. "You and the agent?"

"He *is* rather cute you know."

I was a little shocked. "You can *not* be serious!"

She laughed, "No, not really, just a little jealous."

"Jealous?"

"Yes; you and Siish, Jane and Ariaryn, jealous. It's nice to dream sometimes."

I grinned, just a little. "You should've told us you'd met him, though; like Siish, it was important, really important."

She sounded guilty. "Yes, I should have; I am very sorry."

I took a breath. "It's okay, sorry too." Not the time for a fight. "You did come through in the end. Mind you, I think I'll need to run over firearms safety again with you."

She laughed, "Hey, it worked."

"Isabella, you stuck a loaded gun down your top. You could have done yourself a nasty injury. Not like you've got a lot to spare there."

A wicked grin spread over her face. "I'm not that bad, certainly never had any complaints. I'm just… compact."

————————————

This place had an odd power to it. It made you think and remember, I guess that's the point of it. We stood there awhile. "Why *didn't* you tell us, Isabella?"

"Tell you which?"

"About Vu?"

She turned to me. "What do you think of Sakuya."

I was confused. "Eh? He's nice; I like him; a bit geeky,"

She continued, "If you had to think of a word to describe him, what would it be?"

Still confused. "Petite."

She chuckled, "Why petite?"

"I don't know… Well, to start with, he *is* kind of slight, and he's delicate, sensitive, charming in a boyish sort of way. Yeah, petite, little."

"Do you know why they want him back?"

That one seemed obvious. "Because he shot somebody, they want to execute him?"

"No; they won't execute him, he's far too valuable; there's an awful lot in that petite little boy. You

remember on the shuttle, he mentioned a project?" I nodded; I remembered it. "He was working on jump four, Afira; close to cracking it, apparently. *That's* why they want him back."

I could see that might be important, but all the same… "Okay, so why couldn't you tell us that?"

She had a knowing grin "A *lot* of people here want him to work on it. Willing to do just about anything to get him to."

"Yes, but what's that got to do with not telling us?"

Isabella looked around the ruined playground. "You know, I didn't really stay because of Augustine. He was just the final push. I'd pretty much already decided. It was this place, these people that made me stay. They treated me like nothing special, just one of them, well eventually anyway. Best, probably only, chance of Sakuya having anything like a normal life is if he comes to us on his own, if people just treat him as nothing special." She chuckled "Like me; as you said, you'd have treated me differently if you'd known who I am."

It was the first time I'd ever heard Isabella say us like that. "Does Siish know this?"

She shook her head. "No, I only know because I'm his sponsor."

"You still should have told us."

Isabella reached over and took my hand. "I know."

"So, is there anything else we might want to know?"

She offered, "I'm actually a *Mmrigadeer* with Versal intelligence."

She said it with such a deadpan voice. I laughed, then I looked at her. "You're not kidding, are you?"

She handed me an ID card. "Only way I could get a white five security clearance.[34] I think of it as a courtesy rank."

This place, a strange power, I should have been annoyed, but I was concerned. "It's okay. So, I guess we need to get to work on things, then."

Raconteurs' Rest

Notes

Notes 1-31 appeared with previous parts of this story.

32. Most in the Protectorate regard the Sesheryn as, if not family, extremely close friends. It would be normal to feel betrayed in this situation.

33. The relationship between the Luriani and sesherin is extremely close. The perform many rolls in Luriani mythology including guiding the dead to the afterlife.

34. Protectorate security clearances are coded by colour and level. Red covers domestic and criminal matters, blue covers foreign and diplomatic matters, green covers military. Beyond these are magenta (combining red and blue), cyan (combining red and green), yellow (combining blue and green) and finally white (combining all three). The level is a clearance from one to five. ✪

Critics' Corner

Referee's Aid 7:
Type R Subsidized Merchant

reviewed by Paul Hillers

Mongoose's latest series of eBooks for their Traveller line has finally advanced to the venerable Type R Merchant, lovingly nicknamed the 'Fat Trader'. The booklet follows the same pattern as its' predecessors in the semi-detailed ship series—the first part of the book provides some background/source material, followed by a section holding operational information, with the final section being about the ship itself and some sample ship background material.

There are some additional items that Mongoose has stayed true to for their ship booklet series—the low price of $2.99 for the supplement, the lifting of nearly all illustrations from the core rule book, and the same semi-res (not sure if it's low, and it's definitely not high) 3D deck plan layout.

A few new concepts/background material on freight handling are introduced in this supplement. First, there is talk of 'specialist loading cradles' for ships that can auto-unload a ship: "many ships can be turned around in little more time than they take to get in and out of the cradle." There's additional mention of an overhead crane/gantry system to move cargo containers around inside the ship, "handlerbots" (prevalent at class C ports), and then having to use the slower internal crane at D and E ports. An assumption is that a "handlerbot" is a grav-capable piece of equipment, and it's already stated that it's a fully-automated piece of equipment. There is mention of cargo tie-downs for containers (1-, 5-,

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10-, 20-, 50-, and 100-ton sized) and other cargo. Similar to the 'mule' from the TV series *Firefly* is mention of a small cargo mover that some ships purchase (Cr75,000) that also has the ability to move the container. The description listed later on indicates that this cargo vehicle is also called a handlerbot. It would have been nice to see more clarity in the discussion of the handlerbot as it relates to moving cargo and its uses. There's nearly half a page background on containers in the book talking about various features and functionality. It's not super-detailed, but it's all interesting.

One page is dedicated to the concept of speculative trade, obviously an appropriate topic since we are talking about a trader-class ship here. The information is presented in paragraph-length sections, jumping from topic to topic, with no concept going much more than a paragraph. Most of it is pretty well known or discussed elsewhere (buy low, sell high, speculative trade, selling illegal goods, etc.).

After the section on trade there's about two and a half pages going into more detail about the workings of the ship and the cargo holds, operational information nuggets, variations on the normal configuration (such as tankers) and a couple of paragraphs on converting the cargo hold to carry more passengers or for specialized missions (for example, turning the ship into a makeshift laboratory vessel for science missions). It's stated that some ships travel with holds depressurized to reduce the load on the ship's environment systems. The problem with this item is that, in theory at least, there should be little to no load on the systems if nobody is going in/out of the bay. It does make more sense to keep them depressurized for security—except that means the containers and such are travelling in a vacuum (and unheated one at that) and we have absolutely no data on how well the containers can handle that environment for long periods.

For those that have followed the Type-R trader over the years, you'll appreciate this little nugget—

the location of the mysterious third hardpoint has been finally revealed! According to the explanation given, the two hardpoints (port and starboard) can take energy-based weapons but not any sort of weapon that requires ammunition, as the standard designs have no provision for magazines. The only problem with this explanation is that the third hardpoint is located exactly where the launch is carried. Which begs the question: if that is the case, is there really a hardpoint there? This is the first example I have heard of where an empty hardpoint is also used as an airlock/external craft docking clamp. There's nothing in the rules to preclude doing this, but it's the first time I've heard of it.

There's also some interesting verbiage regarding ammunition as a whole. Classic *Traveller* missed the boat when it came to talking about the actual workings of the missile launcher. Just how many missiles at ready did a turret carry? Was it just one in the pipe? Or could you also store additional ones below in the hardpoint tonnage? This question has vexed many a player and also has generated a lot of commentary over the various versions, including Mongoose's. Dougherty states clearly that reloading is rather rare for most ships; a typical missile launcher carried one in launch position and two more ready to be auto loaded, which is plenty. So the answer to the perennial question, how many missiles are carried on-mount, is canonically answered: three. The only other question raised here is the "two more ready to be auto loaded". Which, in my mind at least, means they aren't set up in a feed system. Of course, one could argue that since there is no adjacent magazine then of course they'd have to be manually loaded (from the two at ready in the hardpoint). I guess it would get rather crowded in there with a triple missile launcher in the turret and six missiles awaiting loading. Based on what I've read over the years trying to explain the gaps in the missile systems, I suspect that Dougherty decided what he thought worked well and went with that. It's certainly not unheard of by authors, and in his defense, missile technology explanations don't belong in a

booklet that focuses on a 400-ton trader. But at some point Mongoose is going to have to go through and straighten out all of their canonical explanations so they all fit together properly—or at least that's hoped for.

There's a short section on having players using the Type-R as their preferred means of campaign transport, but it's only about 1/3rd of a page in length and it's really not that useful of information to most players (too much success hauling cargo can ruin the referee's continual attempt to reduce the amount of credits they have earned). There's talk of giving them a 'very old' ship that requires more maintenance work (and costs)—except the rules really don't differentiate new from old as far as your maintenance costs go.

The last three sections are about operational costs, the 3D deck plan layout and explanation of the various ships environments, and three sample ship descriptions. It's nice that some of the numbers have been broken out for you and how much it costs for x, while you can expect to make y in return. Though some of the included numbers aren't very useful (we all know that refined fuel costs Cr500 and unrefined fuel is Cr100 at a starport). In the description of the low berths it's mentioned that the technology is pretty standard and freezing/revival is done by whoever has some medical training. And basically if you have complications or die, well, you shouldn't have been cheap and travelled in a low berth.

I've complained before about the quality of the graphics and I plan on complaining again. The graphics are simply of terrible quality. While the 3D version is useful, zooming in using a PDF reader just blurs things too much. The included artwork is recycled low-res imagery from the core rulebook, and crammed onto the same page as the 3D deck plan is the one from the book. Though on this one "section 9. Engenering" is a typo that made it through editing.

With the other systems, like the cargo deck, getting additional information and detail, why didn't the escape capsules get something similar? They are woefully ill explained and many ship designs don't even include them. In the very first paragraph we get 'The ship has one 20-ton launch and a full set of escape pods.' And then… nothing. The design actually puts a pair of escape pods on the lower deck near engineering and escape pods in both port/starboard areas. They even have dedicated escape pods in the crew-only section! Kind of what you'd expect from emergency equipment, but one would also (hopefully) expect more descriptions and/or discussions on their operation.

Overall I think that Mongoose is heading in the right direction with these supplements, but they consistently seem to miss the mark on some of the little things. While they are pretty inexpensive at $2.99 ea. (for the ships at least), trying to cram all four deck plan illustrations on a single page makes no sense because there isn't a restriction on length. These are being published as eBooks, and thus adding in half a dozen more pages to allow for more detailed explanations or even spreading the artwork out so that each image has its own page should add zero cost to the product. And even if there were some sort of restriction one could easily drop the two pages of filler illustrations that really do nothing for the book as a whole.

For the price, it's definitely worth adding to your collection. With just a little more effort and thought they could easily put out a much better product at the same price point or slightly higher. Time and again I have said that most gamers are willing to spend money for better production quality, better art, better everything. I am assuming the next ship supplement we will see is going to be the subsidized liner. I have high expectations, but sadly not much hope that they will pay attention to the feedback that consumers are giving them to better their products. ✺

Optional Career Rules

By Kelly Kollman

These rules are intended to be used with the Mongoose *Traveller Core Rulebook*. They may be used as-is, or feel free to modify them to fit your *Traveller* needs. All page references are to the Mongoose *Traveller Core Rulebook* unless otherwise noted.

Background Skills

On page 6, under Education, if the character's Soc is 7+ and Homeworld is High Technology, you can take Flyer (grav) 0 instead of Drive 0.

Qualification/Enlistment

On page 8, under Qualifications, if you fail your Qualification check for the career you want to enter, and you choose not to submit to the Draft (or have already been drafted in a prior career), make a Qualification check on Citizen (Worker). If you fail that Qualification roll, then you must take the Drifter career; otherwise, resolve this term as a Citizen (Worker). This represents getting a job to keep body and soul together—not the job you wanted, but a job nonetheless. Also, remember that a Social Standing of 10 or higher automatically qualifies the character for the Nobility career.

Automatic Draft and Expanded Draft

On page 8, under Qualifications, and page 9, under Drifters and The Draft, as an option, the Referee can say that you automatically have to submit to The Draft the first time you fail an Enlistment check. This is a rule from previous versions of *Traveller*.

On page 9, under Drifters and The Draft, these optional tables can replace or supplement the Draft Table listed.

Opportunistic Draft: Roll 1d6, DM+1 for Soc 8+, DM+1 for Edu 10+. If your result is 1 through 5, pick a Career from the Expanded Draft Table below. Example: if you want to be a Space Explorer, then you would choose Scouts (any), and select Explorer as your Specialization. If your result is 6+, you can pick from the Draft Table on page 9. Example: if you want to be a Starfighter Pilot, then you would choose Navy (Flight). The Opportunistic Draft represents 'connections' of some sort, e.g., family in a position to influence, political connections, et cetera.

Highly Skilled Draft: Reroll on the Draft Opportunity Table if you get this result in your character's first term. Otherwise, roll normally on either the Draft Table on page 9 or the Expanded Draft Table below. If your highest level skill is not listed on any of the Skills and Training tables for that Career, reroll on either table until you roll a Career that has your highest level skill listed as one of it's Skills. If your highest skill isn't listed for any of the Careers in either table, reroll on the Draft Opportunity Table. The Highly-Skilled Draft represents a critical need for a skill.

General Draft: Roll normally on either the Expanded Draft Table or the Draft Table on page 9.

Military/Wartime Draft: This simulates a War or Military buildup. Roll 1d6+1 on the Expanded Draft Table instead of 2d6.

Civilian Draft: Roll 1d6+6 on the Expanded Draft Table instead of 2d6. Reroll if your result is 11 or 12. The Civilian Draft represents an unusually heavy need for workers of all types, such as during a period of economic expansion, or during recovery from some widely destructive event like a war or a natural disaster.

Draft Opportunity (Roll 2d6)			
2	General Draft	8	Highly-Skilled Draft
3	Civilian Draft	9	Civilian Draft
4	Skilled Draft	10	General Draft
5	General Draft	11	Military/Wartime Draft
6	Military/Wartime Draft	12	Rejected
7	Opportunistic Draft		

Expanded Draft			
2	Marines (Support)	8	Agent (Law Enforcement)
3	Army (Support)	9	Citizen (Colonist)
4	Marines (Ground Assault)	10	Merchant (Merchant Marine)
5	Navy (Line/Crew)	11	Drifter (Scavenger)
6	Army (Infantry)	12	Rogue (Pirate)
7	Scout (Any)		

Doing It My Way

Skilled Draft: Randomly pick one of your character's skills, even if it's a 0-level skill. Roll normally on the Expanded Draft Table. If the skill you picked is not listed on any of the Skills and Training tables for that Career, reroll on the Expanded Draft Table until you roll a Career that has the skill you picked listed as one of its Skills. If the skill you picked isn't listed for any of the Careers in the Expanded Draft Table, reroll on the Draft Opportunity Table.

Rejected: Your character just got out of Draft Duty for some reason that has no bearing on the rest of your character's life. Continue on through the Career Qualifications process and don't submit to the Draft again.

Why Was I Drafted?

The draft actually represents several situations—not just the military draft for war ("Uncle Strephon Needs You!"), but pretty much any situation where a person might feel compelled to take a job—or enter a career—other than his/her first preference. Note that depending on the character of your *Travel-ler* universe, even a military career might not be in the service of the Imperium. For those who like to develop back-story for their characters, rather than just building a stat sheet, here are some ideas for reasons that a character might have ended up drafted into a career:

Army (Infantry) or **Marines (Ground Assault):** An insurrection needs to be put down.

Agent (Law Enforcement): You were deputized to help deal with an emergency.

Citizen (Colonist) or **Drifter (Scavenger):** The government has decided to put all the able-bodied 'useless eaters' to work. You've been swept up in the operation.

Merchants (Merchant Marine): An all-out effort to capture more of the haulage on an important trade route is being made, and they need people to man the ships.

Rogue (Pirate): You and your family were captured by Pirates and they gave you a choice: 'either work for us or your family dies'.   ✪

Active Measures

Invasive Species

by Michael Brown

The adventurers are caught up in a conflict between farmers and an agricultural corporation with a species of insect being the key.

This is a Classic *Traveller* adventurer for 4-6 characters of diverse backgrounds and careers, assumed to have been previously traveling and working together. No special skills or equipment are necessary to run the adventure, though wilderness and combat skills or Scientist characters could be very helpful.

Pre-Adventure Preparation

The referee should select or create the following items:

- An Imperial world with a trade classification of Agricultural
- A forest wilderness, scale to be determined according to the referee's needs

- A mercenary outfit of up to platoon strength (see *Book 4: Mercenary*, pages 27-28)
- (Optional) A sketch map of a large office and factory complex, noting the positions of a biolab, a computer room, and executive offices

Introduction

This planet is one of the breadbaskets of the subsector, mostly due to *xengi*, a native insect pollinator similar to the Terran bee. The world's position along a major trade route ensures that its produce is sold all over the subsector. An Imperial noble, Count Salomon bó-Huang, has a fief onworld, administering it and several adjacent planets for the empire.

Over the objections of local farmers, the Count has allowed some corporate farms to operate onworld, complete with substantial land grants and subsidies. The largest of these, Rhyzen-Phytotek, is a particularly aggressive player in the agriculture business; known for price fixing, ruthlessly crushing

competitors, manipulating legal processes, and silencing critics by any means necessary.

Scientists have lately been noticing a sharp decline in the *xengi* numbers. The results of an investigation as to why have so far been inconclusive, but the insects are so important that their extinction would be disastrous for the planet's economy. Meanwhile, Rhyzen-Phytotek hasn't been idle. They've been taking advantage of the rising financial and social chaos to mercilessly expand their operations. This has sparked bitter protests and opposition from the natives. The situation is fast becoming a powder keg.

One: Infestation

While delivering their cargo to the starport, the PCs make the acquaintance of Nathi Bossor (see NPCs below), who is on her way back to her farm from trading offworld. During a conversation, she draws their attention to a report on the holovids about an insect plague in a nearby province—which contains her father's farm. She asks the team for transportation to her farm, promising to also speak with her father about hiring them on temporarily as extra hands to deal with the swarms.

Assuming the group agrees, Nathi pays them Cr500 for the ride. The farm is an hour away by air/raft. During the journey, she briefs them on the strife between the farmers and Rhyzen-Phytotek (give the players the information in the second paragraph of the Introduction.) Her father in particular is a very outspoken critic of the company, and she worries about him; RP has a reputation for ruthlessness.

The Bossor farmstead is bustling with activity; 3D+20 farmers have gathered there in preparation for deploying against the swarm. Kosan Bossor is, of course, happy to see his daughter—the PCs, not so much, reacting to them initially at -3. He apparently thinks they're with Rhyzen-Phytotek. The team can attempt to allay his concerns. The attempt is reflected in another Reaction throw (DMs: Liaison skill; Nathi's intercession, +2.) If the second reaction throw is 7+, Bossor will soften his stance against

them, and offer to take them on as temporary hands at Cr50 per day (all he can pay due to crop failures and RP legal action.) Nathi quietly begs the group to accept the terms and possibly negotiate more later.

The exterminators are equipped with protective gear both professional and homemade; hastily smeared-on insect repellent and improvised face coverings (bandannas, sheer hosiery, etc.) at the very least. The PCs are furnished with the latter if they don't have protective gear of their own. The farmers are armed with pesticide sprayers and bombs, torches, flamethrowers both military-grade and jury-rigged, and whatever else they can find or cobble together that's effective against pests. Several battered farm vehicles are outfitted with spraying equipment. If the PCs have an air/raft, they are asked to take a tank of insecticide aloft and spray.

The target is a crop forest on an adjacent farm about 3 kilometers away. The group moves out an hour after the PCs arrive. Upon arrival, they find the situation is as dire as it was described. The swarm can be seen swirling above and among the trees even from a distance. The extermination party seems to have its work cut out for it.

The growers are deployed in two lines, an advance party that moves deeper into the forest to find and destroy any eggs, and a rear line responsible for using pesticide bombs and flamethrowers to slow or stop the insects' advance. If the PCs have been asked to dust, they may choose whatever area they deem most effective. Nathi will stick close to the PCs.

Once the groups have settled into their tasks, they're suddenly fired upon with automatic weapons! The unseen assailants target the allies in the following order: anything flying, the advance party, and the rear flank.

The attackers soon reveal themselves as they advance: a squad of mercenaries. They're only lightly armored (PCs with Tactics skill realize that this means they weren't expecting trouble); and wear face masks. They are equipped to tech level C, complete with automatic rifles (Book 1) and full field kit.

Active Measures

They do not challenge or attempt to detain or parley with the heroes; they simply shoot.

Any farmers not shot outright run away. The PCs initially face 1D+6 opponents, who call for back-up as soon as they take 40% casualties. The backup (3D more individuals) arrives in 4D combat rounds, during which time the mercs fight either a holding action or a fallback, depending on the PCs' strength. At no time do the adventurers see the full number of opponents. DMs to all ranged combat: -4 (-2 for cover (trees and brush), -2 to vision due to the swarming insects) Flamethrowers only suffer the Cover -2.

Each time the mercs reach a casualty threshold of 40%, they call for backup; 2D more mercs arrive every 3D combat rounds until the PCs are driven off or killed. It's not necessary that the PCs win this encounter; indeed, it furthers the plot if they're routed with the rest of the farmers. The mercs don't pursue.

Two: Application

In the aftermath of the rout, questions remain: who were the mercenaries working for? And why were they apparently protecting an insect swarm?

For the moment, there are doubtless casualties among the farmers. The injured require medical attention, and an accounting must be made of the dead. Any PC attending to wounded farmers are allowed to throw 10+ to find one of the bugs trapped in a fold of a stricken farmer's clothing or tucked into an equally confining place. Neither Nathi nor her father recognizes the species.

If there are Scientists among the PCs, they can analyze the creatures (throw 7+ for success, takes 2d×10 minutes) for more information. The insects are found to be bioengineered, even down to their molecular structure, and they're optimized for pollination. If the party has no one available to do an analysis, one can be contracted out, at a cost of Cr2,500 and 1D days time. An outside analysis also discovers that Rhyzen-Phytotek engineered them.

40 minutes after the defeated victims return to the Bossor farmstead, a vehicle arrives with five people: a woman and a man in expensive-looking clothes, and three combat-armored mercenaries. The mercs are armed with automatic rifles, but keep them slung unless drawn upon.

The woman introduces herself as Muriel van Rien, Chief Counselor for the planetary branch of Rhyzen-Phytotek (see below), and her aide. She minces no words, demanding to see either the leader of the farmers, or the owner of the homestead. When this individual responds, van Rien presents an order for the "immediate surrender of any and all properties pertaining or belonging to said Corporation including, but not limited to, biological properties." The order also prohibits any of the farmers from setting foot on what turns out to be RP land, and ignores the "previous heinous assault against RP personnel both hired and contracted" (i.e., the mercenaries) as long as the lands aren't violated again. Ignoring the order carries the penalty of arrest by RP personnel and delivery to the nearest Imperial officer for judgment; in this case, the local Imperial noble, Count Salomon bó-Huang, who countersigned the order.

Van Rien gives the group five minutes to collect any RP property (the bugs) and turn it over to her aide. If they ignore the order, take longer than five minutes, or offer any sort of violence, the guards have orders to start shooting. If any of the PCs let on that any bugs are being analyzed, van Rien demands their return as well.

Kosan Bossor is furious, and his fury threatens to spark violence. It's in the best interest of the group to calm him down. Bossor makes a Reaction throw with a DM of -4. The PCs can use whatever interpersonal skills they have (Liaison, Telepathy, etc.) at its level as a positive DM. Results of "Violent. Immediate attack" or "Hostile. Attack on (x)" mean van Rien feels threatened enough to order the mercs to open fire as she flees to the safety of the vehicle. Otherwise, the PCs get Bossor to back off. For now.

Once van Rien's demands are satisfied, she leaves them a hardcopy of the order and departs without another word. Neither she nor her party answer questions.

Three: Resurgence

The adventurers have either the results of an analysis proving the bugs are bioengineered constructs; or they have a hardcopy of a legal document, and even more questions. Regardless, the heroes have several options at this point:

1. **Visit Rhyzen-Phytotek:** They can pay a call on Rhyzen-Phytotek itself. The regional office is 60 kilometers away. Once there, the travelers are treated like anyone else interested in seeing how the company operates: they're assigned to a tour group with 3D+3 other people. (Weapons are, of course, forbidden.) The tour takes an hour and is the typical pabulum any company gives visitors, playing up RP's positives and downplaying or ignoring its negatives.

   Team members encounter Muriel van Rien on a throw of 12 exactly every 30 minutes they're at RP. If so, she assumes they're there to do her harm and orders their immediate detention.

2. **The adventurers may slip away to do some snooping.** If they do, the referee should throw every 15 minutes for 8+. The result is an encounter with 1-2 guards armed with auto pistols. If caught, the PCs are held in the security office until law enforcement can come collect them. It's assumed they avoid regular employees unless otherwise necessary.

   The best places to find information are the biolab (located on 11+), the computer room (10+), or the executive offices (8+). DM: +1 if they enlist the help of an employee, through either charm or coercion. Each location takes 3D minutes to find.

   The following items can be discovered in each of the above areas:

   Biolab: Notes and files on the process used to engineer the insects; their intended use; tissue samples; and enough journal entries to allow the heroes to deduce The Plot (see below) on a throw of 5+ (DM +1 if a scientist is with them) and methods for stopping the bugs.

   Computer Room: If the security software isn't first bypassed (11+, DM: per level of Computer skill), an alarm is triggered that brings 1D+1 security guards to the room in 2D combat rounds. The computer contains files on the branch's operations; personnel files; company finances; and backups of the files in the biolab (see above)

   Executive Offices: Hardcopies of everything in the Computer Room; plus detailed documentation of The Plot (below); the executives who ordered it; the identity and mission of the mercenaries; information that could be used to destroy certain individuals (Muriel van Rien's information is particularly juicy); and proof of substantial bribes to Count bó-Huang to look the other way.

3. **Alert the Imperial noble:** Count Salomon bó-Huang is a rather detached sort, preferring to putter around his flower beds rather than take on the business of governing. This is assuming the PCs even get to meet him. They first must get past his staff, who schedule an appointment. The chance of that being the same day is low (roll 11+ on 2D); otherwise, it's 1D days hence. When the appointed time comes, the group is given only 15 minutes to state their business to the Count. Assuming they ask the right questions or keep their ears open, they'll gain the following information:

   • Count bó-Huang did indeed countersign the order enjoining the farmers and the PCs from acting against RP, but honestly, he really didn't look closely at what he was signing

   • He's given RP a rather substantial land grant which, as far as he knows, they're administering properly.

   • Along with the land grant, he's pretty much given RP carte blanche to conduct their operations as they see fit, so long as they don't break

Imperial law.

Any hero with Telepathy (Read Surface Thoughts) also discovers that the Count was paid in credits and top-shelf gardening products by RP to leave them alone, and he doesn't care what happens anyway as long as his begonias come up nicely. If the team can't read minds, this information can be quietly given to them by a concerned staffer on 10+. Any threats or accusations of wrongdoing are dealt with harshly (referee's definition) by the Count's personal guard.

4. **Nose around the forest:** In the forest, the team runs the risk of being caught trespassing: throw 7+ to encounter a patrol of 1D-2 mercenaries once every 30 minutes. If discovered, the PCs are immediately fired upon. However, if the encounter throw result is 11+, the travelers instead discover an Advanced Base (Book 3) deployed in the forest. Outfitted as a field laboratory for studying the bugs, it's manned by 6 unarmed RP scientists who immediately call for the mercs if the PCs don't achieve surprise. Within are the same materials as can be found in the company biolab (see above), but the notes allow deduction of The Plot (below) on a 9+; apparently the field scientists haven't been told everything.

5. **Rally the area farmers:** Savvy PCs should avoid this option, as it's likely to just result in a lot of dead farmers. They don't know the full strength and capabilities of the mercenaries, nor are any of the farmers combat-capable. Still, if they insist, they can send out a call; 3D×10 farmers—armed with hunting and sporting weapons—from the surrounding spreads will respond in 6D hours. But see "Extermination" below.

Whatever the travelers do risks reprisals from Rhyzen-Phytotek. If at any point during their investigations the group throws a natural 2 (fumble); throw 7+ for word to reach van Rien or one of the RP executives. A squad of mercenaries will be sent without delay to find and terminate the interlopers.

Four: Extermination

The adventurers at this point should have a good idea of what Rhyzen-Phytotek is up to. But what to do about it?

Going to Count bó-Huang is counterproductive; he's in cahoots with RP (more accurately, he's in RP's pocket) and he'll surely snitch on the travelers. Also, the word of a noble is sacrosanct in the Imperium. Bó-Huang won't have any trouble painting the PCs to the authorities as sociopathic malcontents, or even pathological liars who should be locked up. The group could go over the Count's head to the subsector Duke/Duchess, but the team's evidence of wrongdoing would have to be rock-solid and incontestable before (s)he would get involved. Assuming RP even lets them get off the planet alive.

Blackmailing Rhyzen-Phytotek is the most dangerous thing the team could do. Even if the company agreed to the PCs' terms, it wouldn't adhere to them for more than a few minutes. And it has enough resources to keep the PCs tied up in court, on the run, or in prison (or some combination thereof) for the rest of their lives. Van Rien has made a career of putting away people that try just such a stunt. And of course, there are always the mercenaries…

Exposing the plot depends on to whom the group exposes it to. The news media would take the story and run with it, causing RP no end of legal, social, and financial headaches; at least long enough for the group to get offworld. Contacting an environmental entity such as the Pan-Galactic Friends of Life is less effective. RP's PR machine is very good at marginalizing such groups and making them look like crackpots. Going straight to Imperial authorities is a mixed bag; they'd certainly take the group's account and evidence seriously, but the wheels of justice turn very slowly. RP would have plenty of time to mount credible legal and financial defenses. Meanwhile, the adventurers' demise becomes another line item in their massive budget.

Active Measures

There are doubtless other ways the team can stick it to the corporation, but they must first deal with the mercenaries. They may have taken some of them out during events leading to this point, but the unit at full strength numbers up to 60, all heavily armed. Their commander is a capable individual, who's been involved in many such campaigns, and their ship and supplies are well hidden.

Still, the PCs could give them a bloody nose. The key isn't a frontal assault, but stealth and guerilla tactics. A marshaled force of farmers (see above) works much better as spies and saboteurs than as troops. With the farmers' help, the PCs might be able to weaken the mercenaries enough to either deliver a decisive coup-de-grace (when it would then be effective to rally the farmers as troops) or make their operation unprofitable enough to drive them off the planet. With the mercenaries gone, the danger of being killed outright goes with them.

Five: Exclusion

The information the PCs gathered, if utilized properly, means prison time for several local RP executives and official censure for Count bó-Huang from his peers. It also spells a huge embarrassment, financial loss, and official scrutiny for Rhyzen-Phytotek. Authorized responses to the decline of the *xengi* and the introduction of the engineered insect would be crafted and implemented.

The PCs' reputations with the farmers—especially Kosan Bossor—would be greatly increased. While there are no apparent monetary rewards from the adventure, an enterprising crew could doubtless think of some way to use events to line their own pockets.

The Plot

The *xengi* are among the most efficient pollinators in Charted Space; so efficient the planet's entire economy revolved around them. The problem, as Rhyzen-Phytotek saw it, is that no one charged for the services the *xengi* provided; thus, no one—especially they—made money from the bugs.

The solution RP developed was simple and two-fold: first, they engineered their own pollinator, one they completely owned right down to the molecular structure (the patents were filed through Count bó-Huang's offices). Then they set about destroying the *xengi* through use of a popular plant fertilizer it produced; its formula had been tweaked to be lethal to *xengi*. Once the *xengi* numbers had fallen to critical levels, RP could then introduce its new insect as a replacement pollinator…for steep fees, of course.

The swarm the PCs and the farmers encountered was a test run of the creatures, designed to study their pollination efficiency, and their mating and feeding habits. To protect RP's expensive investment, they hired mercenaries to guard the test grounds.

NPCs

Count **Salomon bó-Huang** 57998E Age 51 Cr300,000
8 terms Noble
Admin-4; Computer-2; Jack-O-T-1; Leader-3
Yacht

Count bó-Huang is standoffish and haughty, and categorizes others based on their perceived utility. Since his hobby is floriculture, he sees his association with Rhyzen-Phytotek as being mutually beneficial, negative reputation and all.

Nathi Bossor 689957 Age 31 Cr—
3 terms Conservator (Farmer)
Animal-3, Hunting-1, Jack-O-T-1, Legal-1, Liaison-2, Survival-4, Trader-2, Ground Car-1

Nathi is outgoing and engaging with a touch of wanderlust. She was built using "The "Other" Option: An Extended Career for Classic Traveller" in *Freelance Traveller*, Jan/Feb 2014. Her Animal skill is proficiency in controlling working beasts.

Muriel van Rien 3657EA Age 39 Cr91,200
5 terms Litigator (Attorney)
Admin-3, Blade Cbt-1, Interrogation-1, Leader-1, Legal-9, Streetwise-1

Muriel is overly ambitious and overly confident, but undeniably skilled. She was also built using "The "Other" Option…" ✪

Feedback

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- how we can make our magazine better
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Please, give us your opinion! We've provided several ways you can do so:
- e-mail: *feedback@freelancetraveller.com*.

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- Forums:
Traveller Fanzine section of SFRPG: *http://www.sfrpg-discussion.net/phpBB3/viewforum.php?f=36*
Lone Star at Citizens of the Imperium: *http://www.travellerrpg.com/CotI/Discuss/forumdisplay.php?f=13*
Note: you must be registered with the forums to be able to use this method.

Traveller on the Internet   IRC: The #Traveller and #LoneStar channels

Freelance Traveller sponsors channels for *Traveller* fans on the Undernet and Otherworlders IRC networks, and the two channels are "bridged" so that if you're visiting either, you can see what's going on in the other, and talk to people there. For more information about both channels, see our informational pages at *http://www.freelancetraveller.com/infocenter/travnet.html#IRC* and *http://www.freelancetraveller.com/infocenter/travchat/index.html*. Come talk "live" with other Traveller fans about anything at all, Traveller or not, and make both channels "jumping" places to hang out!

You can also run "play-by-IRC" game sessions in either channel; please stop in and ask one of the channel operators (FreeTrav or EMT_Hawk) to schedule it, so we can ensure that the 'bridge' and the 'bartender' are set into a nondisruptive mode.

Please watch the Traveller Mailing List, the Mongoose Traveller forum, and the Lone Star section of the Citizens of the Imperium forum for announcements of Topical Talks!

News About Traveller

Recent Traveller News and Findings

June 2015

- **Christian Hollnbuchner** has released *Picket*, *Mistral Passenger Liner*, *Space Stations XV: Naval Resupply Yard*, *Space Stations XVI: Interceptor Base*, and *Starships Book I0000I0: Escort Frigate*.
- **Mongoose Publishing** has released *Borderland Profile: Wildeman*, and *Referee's Aid 8: Traders & Raiders*.
- **Far Future Enterprises** has released *Traveller⁵ Core Rules (v1.09)*.
- **Gypsy Knights Games** has released *Historical Ships of Clement Sector 1: Trent-class Destroyer*. ⚙

TravellerCON/USA

TravellerCON/USA 2015 will be taking place October 9—11, at the Lancaster Host Resort and Conference Center in Lancaster, PA. Registration is open; the full weekend is $30 for referees or participants (age 12+ only) and may be paid at the door; vendor registration is $60, paid in advance. There is a discounted room rate at the Resort; mention TravellerCON when making your reservation. Come play with us! More info can be found at the Con website, http://www.travellercon-usa.com/ ⚙

Submission Guidelines

What is *Freelance Traveller* looking for?

We're looking for anything and everything to do with *Traveller* – reviews of products, house rules, alternate settings, NPC profiles, world write-ups, adventures, equipment, starships, fiction, "color" articles… If you see it in *Freelance Traveller*, or on our website, we're interested in it. Even if you don't see it in the magazine or on the website, we might be interested; write to *editor@freelancetraveller.com* and ask.

Some things that we want that you might not think of as "*Traveller*" would include reviews of non-*Traveller* products that easily lend themselves to being 'mined' for ideas for use in *Traveller*, or reviews of fiction (in any medium) that "feels" like *Traveller* in some way. In these cases, your article should focus on the *Traveller*-esque aspects of the item. There may be other things, as well; if you're not sure, write and ask.

What about …

The rule of thumb is "If it's a *Traveller* ruleset, or a setting that has been published for use with a *Traveller* ruleset, go for it!". That includes the non-Official *Traveller* Universe settings that have been published for use with any version of the *Traveller* ruleset, including (but not limited to) *Judge Dredd*, *Strontium Dog*, *Babylon 5*, *Reign of Diaspora*, *Twilight Sector*, the two *GURPS* variants on the Official *Traveller* Universe, Avenger Enterprises' *Far Avalon*, and the forthcoming *Traveller Prime Directive*, and any others we may have forgotten.

…Hyperlite?

We've made the decision to support *Hyperlite* as though it were an alternate *Traveller* setting, much like *Twilight Sector* or *Reign of Diaspora*. The changes that Sceaptune Games has made to *Traveller* to get *Hyperlite* aren't really much more than the differences between Classic *Traveller*, *MegaTraveller*, *Marc Miller's Traveller*, and Mongoose *Traveller*, and converting between any of those systems and *Hyperlite*, in either direction, should be 'trivial'.

… Diaspora, or Starblazer Adventures?

If your article is about "crossing over" between these products and any of the "standard" or supported *Traveller* rulesets or settings, by all means, submit it! If it's support for those systems beyond *Traveller*, we'll accept and hold the submission, but will not print it unless/until we've had a reasonable level of expression of interest in such support from our readers.

How should I submit my article?

What needs to be in the submission?

At the very minimum, we need the submission itself, your name (for credit), and a valid email address to contact you at if we need to.

What format should I submit it in?

That depends on what you're submitting. Generally:

Text should be submitted in Microsoft Rich Text Format (RTF), Microsoft Word 2003 (DOC) or 2007/2010 (DOCX), OpenOffice Writer (ODT), or plain text (TXT). Most word processors will support one of those; if yours seems not to, please write to us for assistance. Avoid PDF if at all possible; it is difficult to reformat PDFs for our magazine or website.

Graphics should be submitted in the format that's best for the type of graphic. Most of the time, that will be GIF, PNG, or JPG/JPEG. Submitting in higher resolutions is better; we have tools to resample a picture to make it smaller if we need to – but it's not possible to make a picture larger without it becoming pixellated.

If you're submitting a graphic that you'd like to see us use for a cover of an issue, please make sure that it will fit nicely on both US Letter and ISO A4 pages—we'll crop the picture to fit, to avoid distorting shapes, so please leave reasonable "margins"; don't run "critical" imagery right to the edge where it will look bad if we crop it. A good resolution is 100 dpi or more.

Plans (deck plans, building plans, maps, etc.) may be better submitted in a vector-based format such as Corel-DRAW! format (CDR) or any format that can be imported into CorelDRAW! X4. Scalable Vector Graphics (SVG), Windows Metafile (WMF), Enhanced Metafile (EMF), Encapsulated PostScript (EPS), or Microsoft Visio (VSD) are some common vector formats that can be imported.

How do I get it to you?

Email it to us at our submissions address, *submissions@freelancetraveller.com*. Your subject line should specify the type of article that it is, and what section you think it should be put in, e.g., "Combat Rules for Doing It My Way".