

AAB PROCEEDINGS

The Quadrant One Newsletter

31 December, 1990

Issue 12

Part of the
History of the Imperium Working Group
Family of Documents, Fanzines, and Newsletters

Every author really wants to have letters printed in the papers. Unable to make the grade, he drops a rung of the ladder and writes novels. - P.G. Wodehouse

Collected Notes

You should have noted that I provide a *prime* outlet by reprinted parts of letters in AAB PROCEEDINGS. This goes with its purpose of furthering communication among participating HIWGs. Some information on that less-desirable outlet follows.

NOVELS

At GenCon, Joe Fugate talked about setting a role-playing atmosphere for MegaTraveller. This would be a natural outgrowth of publishing fiction. The best example I've read is *Renegade's Honor*, set in the Renegade Legion universe, by William Keith, Jr.

How affordable are novels? Marc Miller: it would cost 5-10 k to put out MegaTraveller novels (Most novels lose money!), but there would be long-term pay-offs in creating interest in game. Those interested didn't produce a manuscript. He couldn't shake one free in GDW.

SF Roundtable at GenCon: It is easier to publish a first SF novel than a first short story. There are only some 400 slots for si-fi stories per year -- new contributors are fighting established talent for them. Its tough to break in with short stories. Now, look at the *Star Trek* novels. Some good, some bad - but open to new talent.

Continued on Page 6

New HIWG Documents

3310 *ZKK: Organization & Activities*

4 pages. Duncan Law-Green. Details internal organization of S'mrii relief agency. Useful background material for running ZKK characters (PCs or NPCs.)

3311 *Fanzines*

7 pages. Duncan Law-Green. Describes some mercenary units serving the Free Medurman faction. Details each unit's strength, equipment, training, morale, and a short history of each unit. Suggestions for adventures in war-torn Dagudashaag.

3404 - *Gushemege Second Thoughts*

5 pages. David Burden (Oct-90). Sector history and overview, notes on subsectors, xboat routes in 1116, and 1120 faction borders. First from new sector analyst.

3405 - *Gushemege Sector Map*

1 page. David Burden (22-Oct-90). Names all subsectors and computer-generated map.

3406 - *Taqyvia Subsector Summary*

3 pages. David Burden (22-Oct-90). Write-up of Gushemege subsector C.

3407 - *Languages of Gushemege*

5 pages. David Burden (20-Oct-90). Notes and word-generation charts for three languages.

032.02 *Fusion Reactor Systems*

4 pages. Duncan Law-Green. How a fusion plant works, important subsystems, and sabotage task descriptions.

Continued on page 7

The Fifth Force

-- By Clay Bush

Traveller claims to only extrapolate physics as we know it, rather than just invoking ray guns and blasters. This briefly looks at where current physicists see their research leading. Answers are decades away.

Modern physics rests on four fundamental forces: gravity, electro-magnetism, and the strong and weak nuclear forces. The search continues for a fifth force, needed to make the model mathematically consistent. Efforts revolve around a quantum basis for gravity. (Reducing distance to zero increases gravity's force to infinity. Converting to *integer* (*quanta*) units is the problem with getting a *quantum* theory of gravity.)

Quantum physics' standard model contains twenty seemingly arbitrary parameters. This black box, the "Higgs mechanism," determines the masses of elementary particles. Theorists can, however, list many possibilities that would fill the requirements of the Higgs' mechanism.

Study continues for discrepancies between predictions and observations. Discrepancies are needed to determine where to extend current theories and what phenomena the extensions need to cover. Unfortunately, the very successes of the

standard model leave little evidence on which to base a larger, more complete theory.

PARTICLES NEEDED

The so-called *standard* model calls for only three generations of fundamental particles, based on three types of mass-less neutrinos. Collider studies through last year support the existence of *only* three generations. The absence of a fourth, "conventional" neutrino doesn't rule out other fundamental building blocks or an extremely heavy neutrino -- all the current data rules out is extensions of the particles we already know.

Some new set of particles **must** exist. Whether it will be a single "Higgs" particle or something complicated is unknown. The standard model makes no prediction about a Higgs particle's mass, and it (or they) would interact very feebly with ordinary matter.

OBSERVATIONS

In the particle world, the exchange particle of forces (e.g. photons) don't need to have a real existence. Virtual particles can appear from nowhere provided they have a short lifespan. Range depends on mass, because the more massive a virtual particle is, the less time it is allowed to exist. Because a new force must be weak,

theorists expect a massive particle.

Increasingly accurate measuring is reducing the maximum effect a fifth force can have on astronomical events. Measurements of Earth-Luna distances during movement limit a non-gravitational fifth force to no more than one part in 10^{12} of acceleration difference. A long-range fifth force must be very weak compared to gravity, the weakest of the four forces. This seems to rule out very light particles, too small to have been detected yet, for a fifth force. Fortunately, theorists seem committed to very heavy particles...

Still, galactic rotation requires more mass than we can see, etc. The search for missing mass in the universe leads astrophysicists to seek a gravity source in new, heavy particles proposed by quantum theorists. This angle, however, only serves to support the search for new particles - and indirectly at that.

Physicists must create particles to study them. Large energies are needed to bring virtual particles into existence for study. Einstein's theorem $E=mc^2$ equates mass with energy; So, to study more massive particle you need more energy. No accelerator on Earth can produce enough energy to measure the predictions of existing theories.

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HIWG ("History of the Imperium Working Group") is a fan organization detailing the official *MegaTraveller* universe. For information, write to: Ed Edwards; 1410 E. Boyd; Norman, OK 73071-2650.

WHERE THEY'RE LOOKING

Studies dating back to the 1950s show a small but fundamental asymmetry between matter and antimatter. Physicists plan to use today's super-colliders to study B-mesons in hopes of extending the known asymmetry or explaining it. An additional force "would show up most strongly in B-meson decay."

Bottom-quark behavior seems linked to why particles have the mass they do. "Fifty years from now, B physics will still be a hot subject," said James D. Bjorken of the Stanford Linear Accelerator Center.

The energy ranges needed to study them generally exceed the capacities of today's super colliders. Machines coming on-line can explore only the lower ranges theoretical particles can occupy. These theories cannot be *disproved* for decades to come.

SUPER-SYMMETRY

Supersymmetry introduces a complete new set of elementary particles by relating particles of integer and half-integer spin. One attraction is that supersymmetry's local form leads to quantum theories with Einstein's gravitation as their classical limit. This would permit incorporating gravity into a unified description of all fundamental interactions. The strongest attraction is its theoretical attraction -

mathematical simplicity and beauty.

Technicolor theories propose that "the" Higgs particle is composed of elementary particles analogous to quarks and leptons bound by a new ultra-strong interaction. Other theories, dealing with the meaning of generations and the origin of force symmetries, also imply new kinds of matter and force particles.

SUPER-STRINGS

String theories treat particles as strings, not point-like quanta. By treating all particles as strings, with "vibration" determining mass and force, advocates extend quantum theory to include gravity. String theory took off when it was combined with supersymmetry - and produced a description of everything.

Superstring theory, when set up to describe the three quantum forces, produced closed loops with just the properties needed to describe gravity! The major peculiarity is a requirement for ten dimensions, time and *nine* spatial dimensions. This theory is receiving wide attention, but its special appeal is its internal consistency. Discovery of discrepancies in observations may cause superstring theories the most trouble.

COSMIC STRINGS

Cosmic strings are universe-long, very heavy strings described by superstring and other theories. They are not

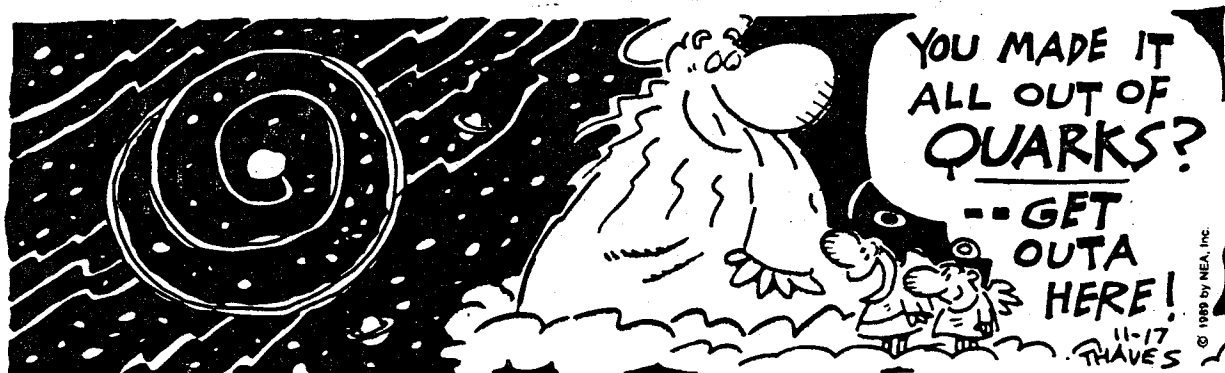
central to those theories - variations can be set up that don't produce them or have them disappear early in the Universe's history. This matters, because the superconducting-cosmic-string theory is ailing.

A major blow last year came when the Cosmic Background Explorer satellite confirmed the near-perfect smoothness of cosmic background radiation. A weaker blow came with an announcement that, to the limits of current measurements, the universe as a whole lacks a magnetic field. Even galactic magnetic fields seem to be local events.

Traveller science and technology should ignore cosmic strings, and avoid supersymmetry and superstring theories. The various versions of the last two probably won't be proved or disproved in the coming decade, or longer. If someone does prove one by finding a Higgs particle in the lower energy ranges, however, it will be front page news.

REFERENCES

Particles and Forces: Readings From Scientific American 1990.
 "Shrinking the Incredible Universal Magnet", *Science News* September 15, 1990.
 "Stronger Support for Equivalence Principle", *Science News* September 22, 1990.
 "Beyond the Z", *Science News* September 29, 1990. % ^ %



Thoughts on the Imperial Army

- Letters from Bob Range

I'm at the half-way point in a 10-week course on how to be a staff NCO in a battalion through division. Mark Weber has us at approximately 218-1120. What's happening in the aftermath of the Rebellion? The MegaTraveller Rebellion seems to have flown by. Much too fast.

The class on the Soviet post-Afghanistan pre-Berlin army prompted this letter. Their system seemed so logical in employment in a diverse society such as the one simulated by the Imperium.

I learned technically why the battalion is used as the foundation of the Imperial Army organization. Using the American system of organization, the battalion is the lowest echelon where use of combined arms (a mix of infantry, armor, and artillery) takes place.

The primary maneuver element in the US system is the battalion, controlled by division through an intermediate brigade headquarters. Our brigades are temporary mixes of infantry and armor which division controls. Artillery support is provided by division or corps. Airborne, light and air assault are controlled by corps, to supplement mechanized and armored gains or objectives.

Our system is too compartmentalized, specialized, and homogenous for use in the MegaTraveller environment. When compared to the Soviet system, you can tell ours is the product of a heavily industrialized, rich culture. Our relatively small, professional, rich-tech army would be unusual in the Imperial service.

I recommend the Soviet military as a model for the Imperial Army rather than the US organization. Cultural,

command, and control problems faced by the Red Army would also apply to the Imperial military. Use squad, platoon, company, and battalion sizes as established in printed material, but consider using Soviet organizations beginning at the regiment, brigade, and division level.

The Soviets use battalions also, only their battalions are not mixed at company level to create combined arms tech forces like ours are. Which is not really necessary, because their maneuver doctrine stresses large unit movement. Combined arms use takes place at the regiment level.

The motorized rifle regiment (MRR) is the front-line offensive unit. The regiment moves from a dispersed grouping of company/battalion clusters (defense against chemical/nuclear attack) very similar to my "bridgehead" concept. With two rifle battalions abreast, a tank battalion in a second echelon to maneuver left or right of the infantry when contact is made, and a third rifle battalion in reserve.

The Soviets have a battle formation we do not, called "the March," which uses their forces' mobility in a way much like I was formulating for the Imperial Lift Infantry in my earlier paper. Unlike the US and NATO, the Soviets do not believe in static defense. The heavy use of grav vehicles in Traveller supports use of Soviet rather than American doctrine in context with Traveller technology.

More important, American battalions and brigades do not have indigenous artillery, so are not self-sufficient on a battlefield. US/European armies lack artillery support until division level. The Soviet has indigenous artillery assets at the regimental and division levels. Therefore, if looked at in the

Imperial context, the regiment could be deployed independently of a higher, supporting headquarters. The western battalion cannot be.

I've made a startling discovery here. Artillery NCOs in my class consider themselves combat support! Not a member of the combat arms triad as traditionally thought (infantry, cavalry/armor, and artillery). I was shocked until I learned how little we use artillery compared to Soviet doctrine.

Since Vietnam we have learned to centralize our control structure more. The Soviets always had that as part of their doctrine. On the other hand, they learned our combined arms doctrine in Afghanistan. They didn't combine infantry and tanks lower than division-level before that war. They committed a tank division to the same sector as a motor rifle division, moving through with either TANK pure or infantry pure leading. Now they assign one tank battalion permanently to a rifle regiment in their table of organization, to be used by the regimental commander as he wishes. If the caliber of equipment and troops were the same as ours I think this doctrine would be extremely effective.

Bob Range, 23-Aug-90

Greetings from El Paso, TX. As we receive classes on operations and battlefield intelligence, I can't help but envision similar situations and procedures being acted out in the 57th Century.

One approach to creating a military role-playing adventure would focus on a military unit's combat intelligence staff and recon forces during the course of a campaign, highlighting a series of battles. By not

Econometrics

having the PCs as unit commanders, the referee retains complete control of the adventure environment.

The original hook could be playing elite mercenaries acting as recon force in a provisional colonial formation. Initially players could be the recon troops, or officers and NCOs of the recon forces. By using mercenaries, no additional rules are necessary for play. Or, since war is on, players could simply be drafted into popular forces.

An innovative approach would be linking strategic activity covered by the adventure action. (Remember Henry Fonda in the movie *Battle of the Bulge*) Use the research rules in MegaTraveller as military officers and NCOs try to identify and analyze enemy force structure. It could be taken one step further by incorporating tables similar to the old Mercenary Abstract Combat Tables. The players could then recommend force composition - determined through their analysis - to the Referee/Commander.

Similar scenarios could be generated for space or COACC operations. **The key would be the use of research rules from *Referee's Companion*** I think that an adventure using these rules could easily be developed. Historical models could also be used to create the background as the Childe Cycle writer, Gordon Dickson, uses: mechanized warfare being built on World War II North Africa and Europe. Some very interesting models have been made available in recent years for low and mid-intensity scenarios. % ^ %

First off, I would like to run down the procedure that I use to generate the economic statistics. I start with the section in STRIKER.

- the tech level defines the average annual income for an individual.
- multiply this figure by the planet's total population, to arrive at total planetary product (TPP).
- modify this figure by the applicable trade classifications.
- translate it into Imperial credits.

Second, the only area where I use concepts from *Trillion Credit Squadron* is in the calculation of

shipyard tonnages at A and B-class starports.

Third, I avoid the problem of determining the government percentage modifier by assuming that they are all set at one.

With the TPP figures that I have computed, you can go on to arrive at defense budgets. Try to determine what percentage of GNP is devoted to the military. There are some rough guidelines in *Strike* that can be used, but there are more grey areas there than I care to deal with right now.

Tim Koors; 411 Lennox; Ballwin, MO 63011. % ^ %

WET NAVY is Coming in CHALLENGE



Minor Human Races

Your list of MHRs (now I know who came up with that useful abbreviation) coincides very nicely with my own researches. I was missing a few from your list, but had some that you didn't list.

I will very gladly send some of my MHRs for making documents. The Answerin are the most fully developed, although there are still things to work out. I sent a version of the Answerin to *Challenge* for possible publication, but that was very recently. I'll still send a copy to you. I also have some basic work on the Thaggeshi, the Tapazmal, the Irhadre, the Cafadi, and the Jonkeereen. The last are not really a MHR, but they're a human variant.

I am working on a detailed

description of what constitutes legitimate genetic drift for MHRs. Mike Mikesh and I have come to the basic conclusion that only the Solomani can legitimately be called *homo sapiens*. All other human races are within the genus *homo* but separate species. This biologically explains Rob Caswell's ruling on interfertility. It's like dogs (*canis familiaris*) and wolves (*canis lupus*): separate species but same genus, and they can interbreed.

I don't know if you're aware, but Rob Caswell says there are five unnamed and unplaced MHRs in the Domain of Deneb. This is in addition to the Darrians.

J. Malizewski; CUA; Gibbons 229; Washington, DC 20064. % ^ %

Collected Notes (continued)

Jeff Swycaffer wrote several novels set in his Traveller campaign. They did not reach Colorado. I have no idea what effect they had on their readers. Does anyone know more about them?

I don't know if DGP or GDW could help finance novels, but Challenge has carried some short stories. With Gary Thomas committed to providing 25 pages of MT material to each Challenge, a slot is available for MT short fiction.

Writers/contributors should be aware of all developments in their industry. It always affects market niches.

SALES

It's a rule that rules make money, magazines break even, and adventures lose money. DGP reports that for lagging sales of MegaTraveller products was inadequate support for the system: too few adventures. DGP and GDW's increased interest in publishing adventures is that available adventures help sales of rules, supplements, and magazines. New writer's guidelines state that new rules and supplemental information must be tied to adventures.

OTHER SYSTEMS

Insurrection by Dave Weber, a *Starfire* novel, is due out from Baen Books. Weber produced the *Starfire* campaign book *Gorn-Khanate War*. Further, according to Task Force Games, *Starfire* will be re-released, with all promised products: TerraFire (ground combat) and a role-playing game (RPG.)

FASA released RPGs for both *RoboTech* and *Renegade Legion*. Both were single books, rather than separate books for different areas. A rules compendium for *BattleTech* also was on sale, consolidating all rules from all supplements.

These last two go back to rules outselling adventures. *SpaceMaster*, *High Colonies* and *GLURPS Space* haven't hurt MegaTraveller - players of those games generally use MegaTraveller supplements.

NEW PRODUCTS

Chuck Kallenbach on *Knightsfall*: "I like it very much, I think this will bring the Rebellion home to lots of MegaTraveller players. I appreciate the "modularity" of the situations, so that I can adapt them for my own purposes. The nugget format looks a little rough, but the book is filled with useful adventure ideas and a great new format for world/system information."

David Ridell on *TD21*: "Finally got TD21 - not a bad way to end the Grand Tour really - I'm looking forward to the Journal."

GENERAL NEWS

DGP has definite plans only for the following sectors:

Dark Nebula - MTA2: Solomani and Aslan

Antares - Onnesium Quest

Lishun - (some product)

So don't worry about DGP "overwriting" your work. Now, work on getting your sector or adventure ready for print, and they'll print it!

Gary Affeldt resigned as **Lucan analyst**. Not playing or refereeing a session for a year is one reason he has less interest in MegaTraveller. His campaigns were also marred by player paranoia: they all had to have separate ships. They also gained too much wealth early on, and began declining to adventure.

Don McKinney resigned as **Quadrant III Editor**. Too many other commitments, finances, and a

feeling he hadn't contributed enough all played parts. The main activity in Quadrant III seems centered around the Daibei sector and faction.

VLAND DOMAIN PROGRESS

Duncan Law-Green: "No feedback yet on revised outline for Vland Campaign (Clay?)."

Clay: *Mea Culpa!* I've been very busy on other projects. My biggest project was a 4000-word article for DGP's *MegaTraveller Journal*, issue 1. Titled "A Concise History of the Rebellion," it is oriented toward those new to the game system. Joe specifically asked that I write so that it could be carried forward into products for years to come. (Look at how the Emperor's List was printed in JTAS, Library Data, and Imperial Encyclopedia.) It took a lot of thought to 1) unify the materials on events from 1116 to 1120, and 2) forget what I knew and write for newcomers. Review it and tell me how I did.

I'm working on an exciting opening adventure for VCB, in Corridor subsector O. I will send a copy of my work on VCB around New Year's.

GUSHHEMEGE NOTES

Gushemege analyst: David Burden sent in 16 subsector names and a subsector. His first thoughts on the course of Rebellion:

"The Ilelish faction acts as Dulinor's "beachhead," and from it he gains the weak worlds of the Backwaters and Loes fairly easily. The latter may put up a struggle, but I see this as a mere thorn in the side.

"The main battle in the sector will be over the industrial heartland, fought primarily between Dulinor and Lucan. Facing such a conflict, it's not surprising that worlds like Trill try to

become Free Worlds. Fierce resistance from the vigorous culture around Rure prevented Dulinor from pushing coreward. With data snakes and cybertoxins ready to crash any computer that moves, the region proves too much for him. It is also, however, too much for itself, and fragments into numerous petty states.

"Lucan (or his successor?) manages to take half of the heartland and Lancia, but finds Rure blocking his way spinward and Dulinor and Ziru Sirkaa on his flanks. Mostly occupied by Lucan and the Ziru Sirkaa, lancia makes the area around Irkhi/Taapvaia its last bastion.

"The Empire of Ed (can I change the name? Please?) is formed from an amalgam of Archipelago, fringe Rure, and Lancian worlds. This suggests it needs a pretty strong unifying force to come into existence - Strephon as per VLDOM1 I suppose.

"I'll discuss these initial impressions with Duncan and the others, and gradually work it up into a HD. Any comments welcome."

GUSHEMEGE CAMPAIGN

We had a local convention 14 September, and I wrote an adventure for it. This may lead into the Vland Campaign Book (VCB). My "campaign" is a planned series of convention tournaments running through Gushemege. I sent ASCII copies of the first two adventures to Kevin Parry (Sirir and Hulr).

The planned route is:

Ushulu 0137 C7829DA-A Hi 700 Im M0 V M4 D

0233 C695335-9 S Lo Ni 903 Im M7 V

Sirir 0131 X7969AA-6 Hi In R 723 Im K3 V

0428 A265301-D N Lo Ni 700 K6 V

Hulr 0727 E73A976-9 Hi Wa 314 Im M2 V M5 D

Lini 0923 EA9A941-B Hi In Wa 902 Im M0 V M0 D

1018 D244412-A S Ni 700 Im M0 V M2 D

Kamurinmur 1015 A260985-E Hi De 813 Im K0 V M8 D

0912 C683623-A Ni 100 Im M7 III

0810 E558642-6 Ag Ni 201 Na M3 V M3 D

1209 B426458-B Ni 923 Im G7 II

1507 B30089C-D N Na Va De 604 Im M2 VI K5 D

Either of:

1905 B7B0510-E Ni De 603 Im G0 II

1605 E1008BB-A Na Va 804 Im M0 V M6 D

Finale:

1702 C- (rest of data blank in data file)

Continued on next page

Documents (con.)

032.03 *Yes, But What are Psionics, Exactly?*

7 pages. Duncan Law-Green. Sets out author's views on psionics, and the variant used in his campaign. Rationalizes this highly contentious area of the Traveller rules, putting psionics on a pseudo-scientific basis rather than a mystical one.

032.04 *Alternative Jump Systems*

6 pages. Duncan Law-Green. Rough calculation of the amount of energy required by a starship's jump net to enter jumpspace. Using this information, alternative methods of providing the energy needed to jump are discussed -- namely, solar-thermal (Jumpsail) and solar-electric (StarGate) power sources.

130.02 *Defense of Margaret*

2 pages. Chuck Kallenbach. Under revision. (I received a revised "Reticulan Parasite", but no change to abstract is needed.)

142.03 *Alternate Starship Combat Rules*

12 pages. Roger Myhre (19-Oct-1990). A second draft, replacing 142.02. Focus is revising rules to make it possible for smaller craft to hit, and eventually damage, larger craft.

Mega Traveller Referee's Exchange

3 pages. Rob Prior (205 Toronto Street, Kingston, Ontario; CANADA K7L 4A9). A list of materials available to referees. Material is available as hard-copy, but is organized into NINE disks. Two disks of ships UCPs *with floor plans* (made with MacDraw program.) One disk of Greg MacClure's vehicles, mainly civilian vehicles.

Rob has a MacIntosh. Useful to other users as a example of what a computer net can do. % ^ %

Collected Notes (conclusion)

VARGR EVENTS

Dave Cheever has been appointed **Windhorn** analyst. He's already sent in 16 subsector names and a detailed subsector.

Phil Athan is preparing **Provence**. He has been re-instated as Provence sector analyst, following discussion at GenCon.

Martin Owens has been appointed **Tuglikki** analyst.

Greg MacClure and Rob Pryor are detailing **Gvurrdon** for official publication, so they didn't have time to send some of the work-in-progress.

ZHODANI OPEN

I'm still looking for Zhodani analysts. One possibility is one of the three Australians who joined HIWG in November. (Ed Edwards is surprised to get three in one month, after waiting two years!) So, Quadrant I could remain the center for HIWGs outside the United States.

SPINWARD EVENTS

Tad Ringo already did **Beyond** sector for DGP. They reworked the trailing subsectors, because of the big lump that intruded there in the Traveller *Library Data* supplements.

Thomas Campbell is taking over as **Touchstone** analyst.

Chuck Kallenbach is reworking **Vanguard Reaches** to match the revised Beyond sector. Thomas Campbell has contacted him regarding what he has done with **Touchstone**, and he has data from Tad Ringo on four subsectors in **Beyond**. Chuck sent me a revised sector map showing revised system locations. (Rather than just redo a

large part of the sector, he has decided to give it a complete overhaul.) The library data he had prepared is no longer valid, but most of his rework is just rearranging.

"I see no mention of either Solomani or Vargr, so I am getting rid of those areas. An occasional Solomani may be seen in the sector, but Solomani are going to be as rare as Hivers or Centaurs."

Clay Bush: People of Solomani descent dominate in the Spinward Marches, while Vilani are less than 10% of that sector's population. This has been explained as resulting from Vilani focusing their colonization efforts nearer home, in Corridor and Deneb. So, there will be racial Solomani in Vanguard.

I agree that Vargr will be rare in Vanguard. The "only" Vargr world in Spinward is Rushu, settled in 1000s from Gvurrdon. (Worlds bordering Gvurrdon must have mixed populations.)

Minor human races are possible. The Vlazhdumecta were mentioned in the *Sky Raiders* trilogy. The Zhodani Alien Module referred to the human-dominated states along the Consulate's rimward borders. (This suggests that the Aslan hadn't expanded that far yet.) I once figured about two minor human races per sector, but Foreven - for example - has a large human population just from immigration and interbreeding.

FOREVEN RESERVED

Mike Mikesh suggested that **Foreven** be reserved for GMs to develop as they want. Joe Fugate and GDW okayed the idea, but it hasn't seen publication.

Herb Petro wrote to resign as **Foreven** analyst. He felt that GDW

and DGP were publishing sectors without checking with HIWG analysts. Rather than try to "outguess" them, he resigned.

The kicker: I removed him as **Foreven** analyst three months ago, because he never answered any letters! I thought he'd died or something. He claims to have detailed half the sector. Did anyone out there know this? He never told Ed Edwards or me.

PUT IT IN WRITING!

The official press do read HIWG documents. (They don't have the time to respond to each.) If you have some HIWG Documents out there, they'll look at approaching you to do a publishable article. If you have nothing out there, they'll go right on.

They have sent letters to "analysts" and gotten no response. Now, they look to see if you have something out for your area before they use a stamp or a phone call.

If this seems harsh, note that DGP is a part-time activity. *All* participants hold down full-time jobs. There are no full-time DGP employees. 8979 Mandan is Joe Fugate's home address! % ^ %

The fact that man is not final is the great unimaginable disturbing fact that rises upon us in the scientific discovery of the future, and to my mind at any rate the question what is to come *after* man is the most persistently fascinating and the most insoluble question in the whole world. Of course we have no answer.
- H.G. Wells

Starship Validation Project

- by Clay Bush

This a project that David Cheever suggested, and that I am running the ball on. Dave noted that many designs are withdrawn by their creator because of discovered errors. He suggested that some designs be double or triple checked before distribution. Having different designers agree that the design was correct would lend credibility to it.

I've carried it a bit farther, to include distribution sample starships and their supporting design worksheet, *for the purpose of letting designers validate their design methodology*. Whether you work in Basic on an Atari or Excel on a Macintosh, does your program get these numbers? Designers work with many tools on many platforms. Now they can verify their methods once, and then happily produce and distribute designs without great fear of major error.

FREE WILL

One issue was DGP's emphasis on referee's being willing and able to create enjoyable gaming. The published rules are meant as guides, and can be changed in campaigns. I feel that referee's will primarily deal with variants, so a solid basic methodology will give them better groundwork for their own designs.

Adaptability focused on letting referees change measures (MW/ton of power plant) or restrictions. The sample designs still benefit a designer who changes these, because a simple test run with the "old" values will tell him whether his totalling methods, etc., work properly.

For example, my first *Planet* sample ignored environmental controls when

computing total control points. Other summing errors have been corrected in my designs. (Others have corrected like mistakes in their designs.)

So, the project went ahead. It was worth doing.

SAMPLE SHIPS

I selected one ship for development at tech levels 11, 12, 13, 14, and 15 each. One curious note: the published sample design worksheets have predominately been at tech level 14. Most published UCPs are at tech level 15.

Sample ships were chosen to cover a range of sizes and hull configurations, and drawn mainly from *Rebellion Sourcebook*. They are:

TL 11 - Aek Naz cruiser from *Rebellion Sourcebook*

TL 12 - Barnard battle tender. A dispersed structure, with provision for carrying large ships.

TL 13 - Weakhto cruiser from *Rebellion Sourcebook*

TL 14 - Solomani A2 Far Trader, from design worksheet in *Travellers' Digest 14*.

TL 15 - Planet cruiser from *Rebellion Sourcebook*

AVAILABILITY

The design files are available in ASCII format, both on GEnie and from me. I will send hardcopies, but I only have an IBM computer. Those who desire an electronic version are referred to the coordinator for their particular make of computer.

If you don't know who this is, check the HIWG Membership Directory distributed to members.

VARIOUS UNEARTHED "ERRATA"

Errata is what the game company puts out. The following are perhaps best called *corrections* to denote their unofficial nature. (They do not include the published errata: if you do not have the errata, send a stamped, self-addressed envelope (SASE) to GDW!)

p71: There are some odd comparisons if you sort the spinal mounts by tech level. The following three changes correct actual discontinuities in the weight columns:

P/A - H should be 8000, not 8500.

P/A - P should be 8500, not 8000.

Meson F should be 4500, not 45,000.

p80: Volume and weight factors for nuclear damper factor-2 should be 2700 and 300, while volume and weight for factor-3 should be 540 and 590.

p80: In *Travellers' Digest 13* it was stated that meson screen power requirements are high by a factor of ten. This has not, however, been in published errata.

p81: The Model/9fib should have a maximum CP input of only 100 million.

p82: In *Travellers' Digest 13* it was stated that when gunnery crew exceeds 50, recompute it as "Cg=50+(Cg/50) (round up)." This has not, however, been in published errata.

p88: In the bearing table, for internal consistency, the last entry should be titled "Over 499,999." % ^ %

Prince Edward Cruiser

Hull: 45000/112500 Displacement= 50000, Config= 3SL, Armor= 50 G

Unloaded= 62,8135 tons, Loaded= 65,6472 tons, MCr 23,851 (d)

Power: 5010/10020 Fusion= 676,350 MegaWatts, Duration= 26/78

Loco: 3600/7200 Maneuver= 3

2250/4500 Jump= 4

NOE= 180, Cruise= 750, Top= 1000, Vacuum= 2850

Agility = 0

Commo: Radio= system x1, Laser= system x10, Maser= system x2

Sensors: PassiveEMS= Interstellar, ActiveEMS= Far Orbit x2

Densitometer= LowPen/100m x1, Densitometer= HighPen/250m x2

Neutrino= min 10 kw x3, EMS Jammer= FarOrbit x1

ActObjScan= Routine, ActObjPin= Routine

PasObjScan= Routine, PasObjPin= Routine

PasEngScan= Simple, PasEngPin= Routine

OFFENSES: MesonGun= Hxx, ParticleAcc= x5x, FusionGun= x95

Batt	1	2	35
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Bear	1	2	35
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Missiles= x Ax, BLaser= xx9, PlasmaGun= xx3

Batt	18	6	5
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Bear	15	5	5
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DEFENSES: Defensive DM= 7, MesonScreen= 2, NucDamper= 6

Repulsors= x3x, Sandcasters= xx 9

Batt	3	15
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Bear	3	12
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CONTROLS: Computer= Model/8fib x3, Panels x3066

HeadsUp Display x100, LgHoloDisplay x20, HeadsUp Holo x20

Bas env, bas & ext LS, grav plates, and inertial compensators.

ACCOM: Crew= 291 (50 x6), Staterooms= 156

Bridge 16, Engrng 94, Gunnery 55, Flight 25, Troops 50,

Command 40, Steward 9, Medical 2

Two Air/Rafts, two launches, and five cutters

OTHER: Fuel= 403218 kliters, Cargo= 112 kliters

PurificationPlant= 48 hours, Fuel Scoops

ObjSize= Large, EMLevel= Strong

Design Notes

25 BRs of 1800 missiles.

305 MW of spare power.

This obsolescent ship was retired from the Imperial Navy in 1096, when the ruler of Ed (Gushemege 2313) offered a large cash payment to acquire it. At the time, it was serving in Ley sector. This only seemed to heighten the ruler's interest, and it was transferred across the Imperium to end his temper tantrums in the Gushemege sector moot.

The Imperial Navy considered the design adequate, and it was phased out primarily due to the availability of tech level 15 vessels to replace it. There are no noteworthy battles that featured any of the twenty vessels.

Despite service in the Gateway Collapses, the Prince Edward - unlike some others of its class - has never seen combat. It was, however, little affected by mechanical breakdowns that afflict other GSbAG products. Most of its service life was spent escorting convoys.

The vessel has become a familiar sight at Gushemege meetings, as the ruling family of Ed have used it for personal transport in the sector. Its cramped quarters precluded any effort to convert portions of it for social receptions.

The small craft have occasionally been replaced by racing craft of various designs, but the Eds have never been known for their racing or design skills, and have won no prizes.

Reports of a ghost are considered efforts by the Eds to add distinction to their ship. Few believe them.

As the other craft in the class were also named for ruling families, others have ended up owned by nobles or their planetary governments. No one knows how many remain in use. % ^ %