

Approved For Use With **TRAVELLER**[®]

the **TRAVELLERS'**
Digest

An Interview with
Marc Miller
on
"The Future of
TRAVELLER"

Adventure No. 7
\$3.95



Special Starship Issue!

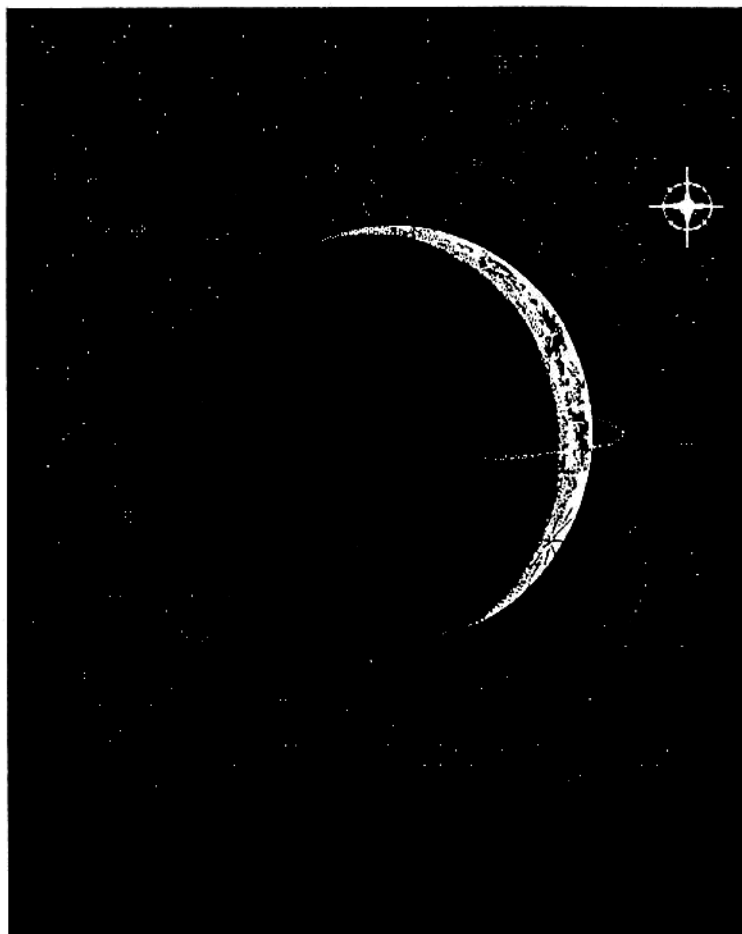
The quarterly adventure magazine devoted to GDW's Game of the Far Future, *Traveller*[®].



Digest Group Publications

The Fourth Imperium

FEATURE ADVENTURE



The Third Imperium has weathered many challenges since its founding. The worst of these, the great Civil War, rocked the very foundations of the empire four hundred years ago...

A ring of ships for the next such war is ready even now, sleeping peacefully above a barren moon. All these weapons lack is a single man, strong enough and *mad* enough to seize them...

—Akidda Laagiir, from "The Candescence Ring" in *The Traveller's Digest*, 1104

Credits for the Feature Adventure:

Designed by Gary L. Thomas and Joe D. Fugate Sr.

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The offices of the Digest are located on Deneb in the Deneb Sector of the Imperium. The Digest is available throughout the frontier sectors of Corridor, Deneb, Spinward Marches, Trojan Reach, and the Reft Sector (spinward).

The publishing date of this adventure is 344-1112, or the 344th day of the 1112th year of the Imperium. *The Travellers' Digest* is published quarterly by Digest Group Publications and is devoted exclusively to **Traveller**®.

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1 2 3 4 5 6 7 8 9 10

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The Travellers' Digest is available quarterly at an individual price of \$3.95. One year subscriptions are \$14.00. Foreign air mail subscriptions (outside the USA or Canada, but not to APO or FPO addresses) are \$22.00 a year. Mail subscriptions (in US funds drawn on a US bank) to:

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Editors' Digest

When we say "Special Starship Issue", we mean "Special Starship Issue". "Travel is the key to **Traveller**," Marc Miller says, and starships are the way to get from here to there in this game. This issue is chock full of articles relating to starships.

When is a starship not a starship? When it's mothballed, of course. An article by Joe Fugate and Bob Liebman explains the ins and outs of putting a starship on ice, and how to thaw it out later when you need it.

Dale Kemper and J. Andrew Keith give us more computer programs that we can install in starships, to help out with battles and crew training.

To top things off, we have a powerhouse adventure giving you an opportunity to run starship combat at any scale you desire. Joe Fugate has integrated the sensors from *Grand Survey* into *High Guard* to make starship combat more realistic and a lot more fun. If you've been waiting for the big one, this is it.

Also in this issue is an article on social standing, a characteristic often misunderstood and underused in **Traveller**. We also wrap up the library data on Lishun Sector, continued from last issue.

Where is **Traveller** headed? How will GDW's new game, **Traveller: 2300**, affect original **Traveller**? Will GDW continue to support it? Marc Miller answers all these questions in a revealing interview. We think you'll enjoy reading it.

As for ourselves, we will keep trying to bring out the best in **Traveller**. Our latest supplement, *101 Robots*, should be at your local hobby store by now. If you don't see it, ask for it. This book adds a whole new spectrum of colors to paint your **Traveller** adventures.

Grand Census, our companion to *Grand Survey*, will be available this spring. What *Grand Survey* did for the physical characteristics of a world, *Grand Census* will do for the other characteristics.

Speaking of fine **Traveller** products, we do have back issues available of *The Travellers' Digest* for issues 4, 5, and 6. Our warehouse manager misplaced some of these, and we sent checks back to those of you who tried to order them from us before he found them. Please try again if you're still missing these issues.

In case you've forgotten, Adventure 4 was titled "The Gold of Zurrian", a mystery set on a 1,000-ton Tukera longliner. The adventure included an 11" x 17" fold-out floor plan of the ship. Also in issue 4 was a subsector map for Kagamira/Vland and Vland Sector library data. Law enforcers were presented as a new character type, and a "Tech Briefs" article on forensic science gave these new characters some high-tech toys to play with.

Adventure 5 was our Vland issue. An article by Marc W. Miller traced the history of Vland from the time of the Ancients through the First Imperium. J. Andrew Keith used *Grand Survey* to fully describe Vland, complete with a center-spread map and a world profile form.

Adventure 6 pitted the characters against the mysterious giants of Kaiid in "The Most Valuable Prey". A map of Shuna Subsector accompanied the first half of our Lishun Sector library data. A double-length "Tech Briefs" detailed the design and operation of grav belts. "Persons and Unpersons" described the standards used by the Scouts to determine if a race is sentient or not.

We were going to send our warehouse manager to K'kree space for a long sabbatical, but he atoned for his mistake by also digging up some older **Traveller** material. If you have a collector mentality, and you've been looking for older GDW, Judges Guild, FASA, and Group One products for **Traveller**, send us a self-addressed stamped envelope and we'll get a list of what's available to you by return mail. These are new copies, lost on Terra years ago and only now seeing the light of day, available at their original cover prices.

Coming up, Adventure 8 will take place on Shudusham, home of the famous robotics conference. Things are not quite what they seem there, thanks to a few K'kree and Hivers who don't get along. A special-length "Tech Briefs" column will convince many characters that they need to buy a hand computer after all. And we'll begin the library data for Core Sector in the same issue.

In Adventure 9, our four friends finally reach Capital, home of Strephon and the Imperial government. Supporting articles will describe the Imperial court, the Emperor's Guard, and everything you ever wanted to know about nobles. Naturally, we'll have plans of the Imperial Palace and grounds.

That should wrap it up for now. See you again in March...

Digest Group Publications products are distributed overseas by:

West Germany: DGP products are imported and distributed by Fantastic Shop, KonkordiastraBe 61, Postfach 21 01 65, 4000 Düsseldorf 1, WEST GERMANY.

Australia: DGP products are imported and distributed by Australia Games Distributors, P.O. Box 117, Moreland, Victoria, AUSTRALIA 3058.

The Fourth Imperium



The Fourth Imperium deals with events surrounding a visit to an Imperial Naval Depot containing literally hundreds of mothballed starships—some of them hundreds of years old. This issue is the seventh episode in the continuing journey of four travellers on their voyage to the Imperial Capital. After leaving their home-

world more than two years ago, the group has passed the half-way point to Capital.

It is assumed that this adventure will be administered by a referee who has read through it, and who is familiar with both this adventure and the rules for **Traveller**. The basic **Traveller** rules are all that is required, although *Book 5, High Guard* is strongly recommended. Paper, pencils, six-sided dice, and square-grid graph paper are needed, and a calculator is helpful.

Optional References: Additional helpful information may be found in:

- *Book 5, High Guard*
- *Adventure 5, Trillion Credit Squadron*
- *Supplement 8, Library Data (A-M)*
- *Supplement 11, Library Data (N-Z)*
- *The Atlas of the Imperium*

The only background information required for this adventure is contained in this issue of *The Travellers' Digest*.

Chapters: This adventure is in several chapters, most of which are material to be read only by the referee.

This introduction may be read by both the players and the referee.

The chapter "Old Starships Never Die..." introduces the characters and the situation. This section is designed to be read to the players in order to acquaint them with the characters and their personalities.

The rest of the adventure is for the referee only; players may discover its secrets only by playing the adventure.

STANDARDS AND ASSUMPTIONS

This adventure takes place in the universe published and described by a multitude of **Traveller** products.

The Imperium is a huge human-dominated stellar empire thirty centuries in the future. It encompasses several hundred light-years of our segment of the Milky Way galaxy.

The Lishun Sector is a 32 by 40 parsec (1 parsec = 3.26 light-years) area of the Imperium near the Imperial core. A sector is divided into sixteen admin-

istrative areas called subsectors. Each subsector is 8 by 10 parsecs in size.

A world is commonly listed with its name followed by a slash and the name of its subsector location. For example, *Dynam/Masionia* refers to the world *Dynam* in the *Masionia* subsector.

Dates: All dates herein correspond to the Imperial calendar. The starting date of this adventure is 014-1103.

Place: This adventure takes place in the *Dynam* System at the Naval Depot orbiting the gas giant moon *Candescene*. The *Dynam* system is in the *Masionia* subsector of the *Lishun* Sector.

CHARACTERS

This adventure is intended for the characters listed. Feel free to change any or all of the genders as desired. Additional background information for these characters can be found in other issues of *The Travellers' Digest*.

Akida Laagir, Journalist 858AAB Age 43 6 terms Cr28,000

Born: 319-1059 on *Mora/Mora*

Interview-5, Streetwise-3, Grav Vehicle-1, Wheeled Vehicle-1, Admin-1, Brawling-1

Possessions: TL15 Holocrystal Recorder

Position: Current recipient of the *Travellers' Digest* Touring Award.

Akida Laagir started at the age of eighteen as a copy boy with the *Mora World Review*; his friendly face and his ability to get people to trust him contributed to his steady career progress.

Living on *Mora*, with its charismatic dictator, the Duchess Delphine the Matriarch, is sometimes a trying experience for any journalist, which may explain his occasionally iconoclastic actions. He is slightly prejudiced against "the system", preferring fresh ideas and fresh ways of doing things.



Akida's most prominent skill is his interviewing ability. By his knowledge of psychology, body language, and oral communication, he has a good chance of discerning someone's feelings and drawing him out.

His admin skill was learned while moving up the ranks, but it is a skill that he would just as soon not need: he much prefers cutting through to the heart of a situation. While he is sensitive to the needs of others, he has a well developed self-preservation instinct that allows him to quickly adapt to strange locales and cultures—a skill that has saved his neck many times.

Dur Telemon, ex-scout B7A85B Age 34 3 terms Cr35,000

Born: 038-1068 on *Mora/Mora*

Auto Pistol-3, Survival-2, Pilot-1, Grav Veh-1, Engineer-1, Gambling-1, Brawling-1

Possessions: Auto Pistol

Dur Telemon was *born* into the Scout service. His father was in the Scout service while Dur was growing up, and both of his grandfathers served in the Scouts in their younger days. Dur enjoyed nothing more as a boy than to sit and

listen to their tales of adventure. The Fourth Frontier War broke out when Dur was a teenager—his father's service in the war was a source of pride for the entire family.

Dur's individualistic nature meshed well with his duties in the Exploration Office of the Scout Service. In his first term, a "routine" mapping expedition on Pannet/Rhylanor suddenly turned into a hostage rescue operation, and it was then that Dur happened to save Dr. Krenstein's life.

The harsh conditions Dur often encountered taught him much about staying alive and living off the land in exotic environments.

Dur has resigned from the Scouts and is travelling with his uncle, Akidda Laagiir.

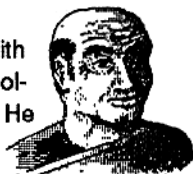


Dr. Theodor Krenstein, scientist 495FCB Age 59 10 terms Cr250,000
Born: 173-1043 on Rhylanor/Rhylanor
Robotics-5, Leader-3, JOT-2, Laser Rifle-1, Grav Veh-1, Electronics-1, Mechanic-1, Medical-1

Possessions: TL15 Hand Computer, Electronic Tool Kit, Robot AB-101

Position: Graz Redniz Chair of Computational Robotics at Rhylanor Institute of Technology on Rhylanor/Rhylanor (on sabbatical leave).

Dr. Theodor Krenstein is a gifted, multi-talented scientist, with interests ranging from anthropology and archaeology to xenology and zoology, including most of the "ologies" in between. He holds advanced degrees in computer science and robotics.



After three terms as Dean of the School of Robotic Science at the Rhylanor Institute of Technology, he was appointed to the Graz Redniz Chair of Computational Robotics, a prestigious and coveted position. He has to his credit 12 books, over 100 articles in technical and scientific journals, and holds more than 250 Imperial patents for his inventions and computer work. Despite this, he has become bored with academic life, and realizing his age, he has taken an extended sabbatical in order to make forays into other parts of the Imperium.

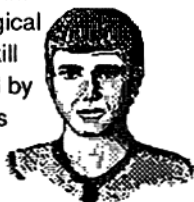
During a test of Scout survey robots in 1090 on Pannet/Rhylanor, members of a disgruntled anti-technist group kidnapped Dr. Krenstein and threatened to kill him if the Scout service didn't meet their demands. A young scout named Dur Telemon was part of the all-volunteer raiding team that finally freed Dr. Krenstein; in fact, Dur was the first to reach the Doctor.

In the following year, Dr. Krenstein constructed his personal servant and bodyguard, AB-101.

Aybee Wan Owen, valet FD9C7B Age 19(?) 0 terms Cr0
Constructed: 1091 on Rhylanor/Rhylanor
Medical-1, General Language-1, General Vehicle-1, Lt Laser Welder-1

Position: Personal servant and protégé of Dr. Theodor Krenstein.

AB-101, affectionately known as "Aybee", is a pseudo-biological robot designed and constructed by Dr. Krenstein. His UPP, skill levels, and other personal data are approximations, calculated by comparing human norms with Aybee's abilities. Although his programming gives him certain basic abilities, because of his lack of true artificial intelligence he can make errors in judgment; in abstract situations, this effectively lowers his true skill level.



Aybee's "weapon" is a light laser welder, built into his right arm. Dr. Krenstein has designed Aybee in such a way that his arm (ostensibly used only as a tool) can pass inspection by officials, since laser welders are not restricted by local law levels; however, voice override controls allow Dr. Krenstein to use Aybee as a weapon at short range.

Because Dr. Krenstein ordinarily conceals Aybee's true nature, Aybee was mistakenly granted knighthood in the Order of the Emperors' Guard along with the others, after certain events on Jode/Pretoria. Such an occurrence would be most humiliating to the emperor, so it has become imperative that Aybee's "true identity" not become a matter of public knowledge.

THE UNIVERSAL TASK PROFILE

In all our adventures we use the UNIVERSAL TASK PROFILE or UTP, which provides you with all the information you need about a task to be performed. Using the UTP you can quickly roll for a task attempt and know:

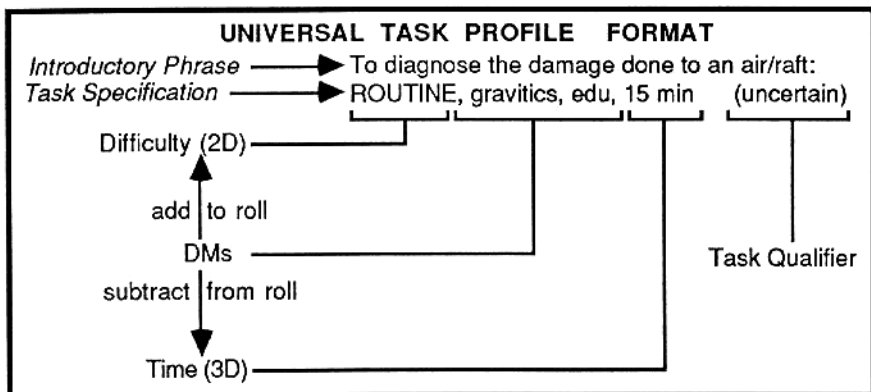
- the relative difficulty of the task;
- which skills and character attributes are useful;
- if the task is hazardous;
- how long the task attempt takes;
- if you can retry the task in the event of an unsuccessful attempt;
- if a mishap occurred while attempting the task.

In addition, you can:

- rapidly determine the effects of a mishap;
- discern the extent of the damage;
- know what tasks are needed to proceed with repairs.

In short, the UTP system provides a comprehensive and playable framework for defining and attempting tasks. We encourage you to make liberal use of it. A complete summary of the UTP procedures is on the next two pages.

The UTP: Universal Task Profile—Handling Tasks in TRAVELLER



Difficulty: Roll 2D for success. The success roll needed for each specific difficulty level is shown in the UTP Procedure Summary, below.

—EXAMPLE: A roll of 11+ is needed to succeed at a DIFFICULT task.

DMs: Add to the difficulty roll (improves chances)

Subtract from the time roll (shortens task duration)

DMs indicate which skill(s) and which characteristic(s) are judged most crucial to task success. Generally DMs are limited to these two items. Other factors affect task difficulty, rather than becoming additional DMs.

- *crucial skills:* use character's skill level as the DM.
- *crucial characteristics:* characteristic+5 as the DM (drop fractions; DM range is 0 to 3).
- the absolute maximum DM is ±8.
- regardless of DMs, a natural roll of 2 is a "fumble" and results in automatic failure.

—EXAMPLE: A character with gravitics-3 (skill DM of 3) and education 9 (characteristic DM of 1) = total DM of 4.

Note: If the character does not have the crucial skill (not even level-0), make the task at least one level harder, and perhaps even IMPOSSIBLE. At the ref's option, substitute a related skill at a handicapped level, or use (INT+EDU)+5 (represents all the intellect, knowledge, and experience brought to bear).

Time: Indicates the base time period for the task; a task is assumed to take an average of 10 of these time periods. The actual time duration of the task attempt (successful or not) is:

TIME x (3D - DMs) (absolute minimum is 3 time periods)

Note: If time period is omitted from the UTP, the task is assumed to be instant.

—EXAMPLE: A 3D roll of 15, with a DM of 4 subtracted from the roll, gives a modified roll of 11. For a time period of 15 min, the duration of the task is 165 minutes (2hrs, 45min). In this example, the absolute minimum would be 45 min.

FAILED TASK ATTEMPTS

Ordinary Task: roll 2D on the Failure table (UTP Procedure Summary).

Hazardous Task: roll 3D on the Failure table.

UTP PROCEDURE SUMMARY			
	<i>when attempt fails</i>	<i>when mishap</i>	
Die	Task Attempt	Failure	Mishap
2	automatic failure	reroll	reroll
3+	SIMPLE	retry	SUPERFICIAL (1D)
7+	ROUTINE	check determination	MINOR (2D)
11+	DIFFICULT	Mishap (2D)	MAJOR (3D)
15+	FORMIDABLE	Mishap (3D)	DESTROYED (4D)

EXPLANATION OF FAILURE TABLE RESULTS:

Retry: failed the task, but can retry with no penalty.

Check determination: failed the task, and must stay determined to retry the task without penalty. Staying determined is a special task with a UTP of:

DIFFICULT, end, int (end + int represents a character's force of will)

- if successful, can retry the task with no penalty;
- if not successful, the character has two choices:
 1. retry immediately, but task difficulty increases one level
 2. retry task with no increase in difficulty by waiting 10 times the duration of the failed task before retrying again.

Jack-of-all-Trades skill provides one free retry per level of skill (represents the character's resourcefulness).

Mishap(2D): failed the task, roll 2D on the Mishap table (UTP Procedure summary). After correcting the affects of the mishap, the task reverts to "check determination", should a retry be desired.

Mishap(3D): same as "Mishap 2D", except roll 3D on the Mishap table.

GENERAL DAMAGE AND REPAIR

To perform repairs: diagnose the problem. The standard diagnosis task is ROUTINE (uncertain). The referee must determine DMs and time. Repairs in the shop can be made without a successful diagnosis at an additional cost multiplier of 1D (just replace the entire assembly if you don't know what's wrong).

Once diagnosis has succeeded: establish a UTP for the repair task based on the damage level(see the table below).

GENERAL DAMAGE AND REPAIR

Damage Level	Operate?	Repair Task (shop)	Repair Cost (shop)
SUPERFICIAL	Yes	SIMPLE	1D% of new price
MINOR	No	ROUTINE	1D x 1D% of new price
MAJOR	No	DIFFICULT	2D x 5% of new price
DESTROYED	No	FORMIDABLE	2D x 2D x 5% of new price

For REPAIRS IN THE FIELD, increase task difficulty one level.

For LACK OF TOOLS, increase task difficulty one level.

For LACK OF SPARE PARTS, increase task difficulty one level.

All of the above difficulty increases are cumulative.

If an item with MAJOR damage was last repaired in the field, any task using that item is automatically HAZARDOUS (high risk of another breakdown). This lasts until the item is finally repaired in the shop.

TASK QUALIFIER

Hazardous: Task has a much higher risk of mishap if it fails.

Safe: Opposite of hazardous. If a mishap occurs, it is always SUPERFICIAL.

Unskilled OK: The crucial skill is not essential. Do not increase task difficulty if the character does not have the crucial skill.

Uncertain: Immediate feedback on how successful the task attempt was is not possible. When the player rolls for the task attempt, the referee also rolls a hidden roll for the same task, which serves to modify the player's roll:

If the player's roll...	If the referee's roll...	The player gets...
FAILED	FAILED	NO TRUTH
FAILED	SUCCEEDED	SOME TRUTH
SUCCEEDED	FAILED	SOME TRUTH
SUCCEEDED	SUCCEEDED	TOTAL TRUTH

NO TRUTH: The player is totally misled as to the success of the task attempt.

SOME TRUTH: The player is given some idea of the success of the task attempt. Some valid information is given—although the player can not be sure this is the case.

TOTAL TRUTH: The player is not misled in any way as to the success of the task attempt.

Totally valid information is given—although the player may not believe this is the case.

OLD STARSHIPS NEVER DIE

"This is the captain. We'll be docking in about ten minutes." The voice floated into the ship's upper lounge, inobtrusive but audible.

"Kidd, look! It's a PRZ-9! And over there--a White Wasp."

"That's nice, Dur," Akidda answered. "I thought you'd seen starships before."

Dur was taken aback by Akidda's nonchalance. "Starships? The White Wasp was a top fighter during the war. The PRZ-9 was the first ship to carry the Retton mesons. These aren't just starships—this is more like a naval museum."

Akidda's bored reply was preempted by the entrance of Dr. Theodor Krenstein and Aybee, his robot companion.

"Hi, Doc," Dur said. "Take a look at all these ships, will you? I bet you've never seen anything like this."

Dr. Krenstein brushed Dur's excitement aside, gesturing toward Aybee. "I want you two to hear this," he whispered to the two humans.

"Aybee," he said, "where are we now?"

"We've just arrived at the Dynam system, in Lishun Sector."

"Good, Aybee. Now, why did we come here?"

Aybee scowled, and the doctor smiled. "Answer the question, Aybee."

"Well, Doctor, I guess we're here because Dur wanted to see the ship his great-grandfather was on during the Third Frontier War."

"Excellent, Aybee, but there's more. That applies to Dur, but why are Akidda and I here? And why are you here?"

Aybee looked confused, and bit at one of the fingernails on his left hand.

"I don't know, Doctor. It doesn't make any sense, I guess."

Dr. Krenstein was patient with his research project. "Sure you know, Aybee, just think a little harder."

Aybee rubbed his chin and stared off to one side, as if deep in thought. Suddenly his face brightened. "I remember now," he said. "The three of us are here with Dur because we want to see the ships that our great-grandfathers served on during the war."

Dur and Akidda looked at each other in disbelief, then turned toward Krenstein with questioning eyes, but he motioned them to silence before they could speak. "No, Aybee, not quite. Are you sure you can't think of a better reason? Think of all the factors involved. Why are the three of us here at Dynam?"

"I don't know, Doctor, I just don't know." Aybee shook his head slowly from side to side. "Dur is here because he holds an emotional attachment to his relative, and there are concrete objects here which recall that attachment, but the three of us—I just don't know. The motivational heuristic patterns for KREN-361 and SQD-722 do not correlate with--"

"Aybee!" The doctor's tone was sharp. "That's not the way we talk, remember?"

"I'm sorry, Doctor, it's just that I—wait a minute. The three of us are Dur's friends. He came to Dynam to see an old ship, and we came because we're his friends so we can share in his pleasure in seeing the ship. Is that right?"

The doctor's smile matched the robot's. "That's perfect, Aybee, I'm proud of you. We're about to dock now. Run to our cabins and make sure we haven't forgotten anything, will you?"

"I'd be glad to, Doctor." The robot turned and walked off.

Aybee was barely through the door astern when Dur spoke up. "Doc, what's with Aybee? He sounds awful. And that crack about his great-grandfather—he knows he was built in your lab on Rhylanor."

"Hold on, Dur, and I'll explain. Do you remember my mentioning the difference between conventional and synaptic processors?"

Akidda nodded. "Sure, a few months ago. You said that synaptic processors weren't as good because they make a lot of mistakes."

"Not exactly, Akidda. In their own way, synaptic processors are better than conventional robot brains, because they mimic human thought processes. But synthetics do make a higher percentage of false matches, which the conventional processors must correct. Aybee's brain has more synaptic processing than any other robot that I know of. And about an hour ago, I turned off some of his brain, so his synaptic percentage is now even higher."

"But Doc," Dur said, "we can't walk around like this. If Aybee goofs up in front of anybody, he won't fool them for a second. If the emperor finds out a scrap of tin got knighted, we'll be kicked out of Capital and sent home in disgrace."

"Dur has a point, Doctor." Akidda waited for his reply.

"Don't worry, it's not permanent. What's noteworthy is that Aybee kept his emotion simulation programming even without his full brain power, so my experiments are showing signs of success. I was so excited, I wanted the two of you to see it before I fixed him up."

The captain's voice filtered through the lounge again. "Docking is now complete. Welcome to Candescene. Please wait on board for your assigned liaison officer."

"Security is tight here, huh, Doc? Maybe you should turn Aybee on right now."

"No, Dur, there isn't time. I'm sure Aybee can last an hour or two."

Aybee came back into the lounge. "Nothing to report, Doctor. The steward took our baggage this morning."

"Thank you, Aybee."

A short, dark-haired man in a naval uniform appeared at the lounge door, then strode toward the four. "Is one of you Sir Dur Telemon? I'm Lieutenant Etzell."

Before Dur had a chance to react, Aybee's hand shot forward and gripped the hand of the officer. "Lieutenant Etzell, you said? You look familiar, I'm sure we've met. My name is Aybee Wan Owen."

"Mister Owen? No, I don't think I've had the pleasure. Maybe you mistake me for someone else."

"No, Lieutenant, I'm sure I've seen your face somewhere. Were you ever in Vland Sector?"

Krenstein's voice was authoritative. "Aybee, I think you are mistaken. Besides, the lieutenant wants to talk to Dur, not to you."

Dur put forth his hand and introduced himself while Krenstein pulled Aybee away. Akidda also stepped closer to the doctor, turning his body so his mouth could not be seen by the lieutenant.

"Aybee's not wrong this time," he whispered. "I've seen that face before, too. And I remember where."

REFEREE'S SYNOPSIS

To explain who this lieutenant really is, it is necessary to backtrack in time, to recall the history of a man long believed dead.

Zid Rachele founded the Rachele Society, a fanatical Vilani supremacist group, in 992. This radical group wanted not only to live in a universe ruled by Vilani, but also to exterminate the other human races to achieve this end. The group's policies culminated in an attempted takeover of the Pretorian (Deneb 0406) government in 1010. An attempt at nuclear blackmail backfired when 26,000 people (including 1,900 Rachelean commandos) were killed by a nuclear explosion after the Society seized Imperial Scout facilities on Saki (Deneb 0306).

Rachele was never found after his escape from the prison world Exile (Deneb 1928) in 1015, but Imperial authorities had little doubt in their minds that the Rachele Society was no more.

In fact, Rachele and his society did live on. Today, Zid Rachele is 140 years old, but the use of anagathics has given him the feeble health of an 80-year old. His physical infirmities have not diminished his insane determination to vanquish the "lesser" human races and establish a permanent Vilani rule over all of explored space.

To this end, Rachele and his band have labored for years on the most secret of projects. Hiding up at the Dynam Naval Depot in Lishun Sector, Rachele's cohorts have infiltrated about 10 percent of the Naval posts there. Over the years, they have gotten access to top-secret security codes, allowing them to engage in secret activities and to cover their tracks.

The goal has been to refurbish as many starships as possible, and then to flee with these coreward and a little trailing, to Meshan Sector, to which Vilani spread during the First Imperium. This area is now outside of the Third Imperium, but Vilani do still live there, often under the rule of Vargr, who themselves moved into the area after the collapse of the Second Imperium.

Once the Rachele Society gets beyond the Imperial border, Rachele plans to establish himself as the head of the new "Fourth Imperium", and from that expanding base to take over the Third Imperium for the benefit of the Vilani race.

The plan is almost complete, and over 20 ships are in varying stages of readiness.

Rachele has negotiated with a Vargr corsair to provide diversionary fire, with the promise of some of the ships, a large cash reward, and rule over some of the Vargr worlds within the Imperium. Rachele plans to double-cross the Vargr once he has the ships. Meanwhile, it is the Vargr's intent to double-cross Rachele and take all the ships for himself. There is no honor among thieves, particularly when one is a Vargr and the other is a racist.

The only weak chink in Rachele's armor is Aybee's recognition of the liaison officer. In Adventure Number 5, this officer posed on a forged data disc as a

representative of Sharurshid, supposedly some thousands of years ago. Rachele's plan in this incident was to revise history with this forgery, implying that the Solomani were a minor race, which had achieved jump drive only through the intercession of Vilani explorers of that time. This plan was thwarted by the four adventurers when they discovered certain inconsistencies in the disc and in the story of the better who supposedly "found" the disc on a drifting starship.

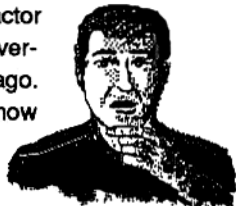
Depending upon the exact outcome of Adventure 5, you will need to give your players more or less background information on this. Adventure 5 was purposely set up not to point suspicion at the Rachele Society, and it is likely that your players decided some other group was behind the plot. In this adventure, they will discover the truth about Adventure 5, while destroying the malicious plans of Zid Rachele once and for all.

Lieutenant Etzell

937DFC Age 50 8 terms

Linguistics-4, Engineering-2, Gunnery-1, Admin-1, Computer-1

Lieutenant Etzell was transferred to Dynam two years ago, and served in many different locations before that. He was indeed the actor who portrayed the Sharurshid agent who supposedly delivered the secrets of jump drive to the Solomani 3,000 years ago. As a working member of the Rachelean conspiracy, he is now stationed at Dynam, where he is helping to recommission the ships that Rachele plans to steal.



It is coincidental that he has been assigned to the four characters as liaison officer during their visit; he does not know who they are, nor does he know of their role in uncovering the earlier plot. The lieutenant's linguistics skill was learned as part of the Rachelean plot: Etzell can speak Old High Vilani fluently, with no trace of accent.

Admiral Walter

52AAF8 Age 46 7 terms

Robotics-4, Vacc Suit-2, Pilot-2, Ship's Boat-1, Engineering-1

Admiral Walter was transferred to the Dynam Depot 24 years ago as a Lieutenant. He is proud of his service to the depot, and his steady increase in rank reflects the contributions he has made to the depot's efficiency.



The admiral knew little about computers or robots when he arrived at the depot, but encounters with this technology sparked his interest, and he spent most of his off-hours studying about robots in the depot's extensive library. His skill in this area is excellent, and he has put it to good use by replacing many of the personnel who earlier performed dangerous and tedious functions, with robots, who are expendable in

a way that living beings never could be. The most visible of these the Naasirka Ship Shepherds, which float among the mothballed ships, constantly adjusting their positions in orbit.

The admiral is polite to the visiting knights, and is particularly interested in talking to Krenstein, whom he admires for his work in robotics. Neither is the admiral averse to the possibilities of his depot being written up by Akidda Laagir in an influential magazine.

Dynam Depot

The Dynam Naval Depot is the home of about 1,200 mothballed ships. The depot differs from most naval depots in that the Dynam facility does not have architectural capability, and no new ships are designed or built there.

Assignment to the depot is by volunteer request only, since it takes a certain type of personality to enjoy the work at Dynam. Even so, many starmen find that life at Dynam is not what they expected, and they transfer out again after a single term. Since Admiral Walter has been in charge, the rate of transfers out has dropped.

A Guided Tour

If the characters think to ask, the admiral will invite them to tour the *August*, a 75,000-ton battlecruiser. The ship was the one on which Dur's great-grandfather served during the Third Frontier War; after about 30 years of service, the ship was decommissioned and sent to Dynam.

Ensign Amherst, a young recruit, will be assigned to shuttle the characters over to the vessel in an open top air/raft. The five of them will be wearing vacc suits, with strict instructions not to take them off, even if some areas of the ship seem to be pressurized.

The trip is an exciting one in itself, as the air/raft is kept on full throttle along the way, there being no air resistance to contend with in the vacuum of space. Ensign Amherst is an amiable fellow (with no connections to the Racheleans), and he will tell the characters about the mothballed ships during the two-hour ride to the *August*. The tiny radios in the five vacc suits are tuned to the same channel.

The 1,200 ships in storage form a ring around the moon Candescence, which orbits Trojan, a small gas giant in the Dynam system. To store a ship, the Navy shuts down and seals the jump drive in a coating of high-tech xeroplactic, which can be removed quickly and cleanly by the application of a special gas. Most of the ship is depressurized, but the power plant and the computer are left operational. The computer runs an anti-hijack program, and the power plant operates at its minimum level.

The ships are refueled about once every two years, with a small fuel supply left on board meant to last only that period.

Keeping the power plant running is mechanically better for it than shutting it

down, the Navy has found. Since the ships are unmanned, the less fuel present, the less likely is an explosive mishap. Every ship is inspected on a two-year cycle, when the exterior is checked for pits or breaches from space debris, and the interior is checked to make sure that the power plant and computer systems are operating properly.

On the *August*

The air/raft is magnetically parked against the hull of the *August*, and Ensign Amherst radios the base that the group has safely arrived. The electronic lock on the ship's door displays a date, showing that the last entrance to the ship was about eight months ago. When he enters the access code, the display instantly changes to show the current date.

Surprisingly enough, the door does not immediately open, because the air lock must cycle. Ensign Amherst knows that sometimes some areas of a ship are at least partially pressurized for various reasons.

Once inside the ship, through the second air lock door, Ensign Amherst is surprised that the emergency lights are on in the corridor. He wants to go up to the bridge to check out the control panels, because the ship could use fuel more efficiently if as many systems as possible were shut off.

The Bridge

Ensign Amherst leads the way through the battlecruiser's corridors. The entire passageway to the bridge is pressurized. When he pushes the button to open the bridge door, the door slides back to reveal a man bent over the control panels. The man is wearing a naval vacc suit, like the ones worn by the characters and by Ensign Amherst, but he has removed his helmet and gloves and laid them to one side.

When the man hears the door open, he turns around as if to say something, but when he sees the party, he pulls a pistol from his holster and fires. The Ensign drops lifelessly to the floor, leaving the characters to fend for themselves against this intruder. None are armed (except for Aybee, of course), but the Ensign's pistol is within reach. If Aybee is ordered to fire his laser, his programming will insure that he pulls off his vacc suit glove first; this will cause no adverse effects as long as he remembers to put it back on later.

The Busy Crew

There are four Racheleans on the *August*, readying the ship for the big hijacking. Once the man on the bridge is dealt with, the characters can look over the ship's instruments. They show that the ship is fully fueled, and that several areas of the ship are pressurized, including the maneuver drive and the damper screens.

If the player characters search for other intruders on the ship, they will not find them, nor will the hidden Racheleans attack.

If the party leaves the ship, the other Racheleans will clean up the mess and leave no evidence behind of their visit. The Admiral will be concerned that one of his starmen was killed and will order an investigation, but nothing will be found.

Even if a search of all ships is ordered, the Rachelean infiltrators at the base can see to it that the ships involved in the conspiracy are the last ones to be searched, and by that time it will be too late.

If the party takes advantage of the ship's radio and calls for assistance, help will be almost immediate. Troops, Navy ships, and armed ship shepherd robots will surround the vessel, and all 75,000 tons will be searched from stem to stern.

The Racheleans, if captured alive, will commit suicide by swallowing small doses of fast-acting poison. If the ship is searched, no evidence of what was going on will be found. All the Navy will know is that some people were on the ship, and that some systems were being made operational, including the power plant, the spinal mount, and the life support system. The ship is fully fueled.

Stealing Fuel

Sometime after the party returns to the base ship, they will be approached by a middle-aged Navy starman. He has been afraid to speak out before, but since the characters are outsiders and nobles besides, he feels that he can and should trust them with his suspicions.

About four months ago, a friend of his who worked in logistics confided that he thought someone was stealing the Navy's refined fuel. He had noticed that the amount of fuel consumed was about eight percent more in the past few months, while the number of new ships had barely increased. The friend mentioned that he wanted to collect more information before he went to his higher-ups, but the next day he died when his vacc suit accidentally ruptured.

The starman kept his mouth shut about it until now, because he thought it was an inside job, and if he spoke up he would be killed, too.

The "Culprits"

The starman believes that the fuel is being stolen by some scientists working at a research project at Calefact, another moon orbiting the gas giant. The moon is the only place near enough to the Naval base to store fuel, yet it is far enough away to be unnoticed. There are only a handful of scientists there, and he has no idea what they are doing. He thinks that they are a front for pirates who are stealing the fuel, then selling it at Dynam for a cut-rate price. He knows that fuel is cheaper there than anywhere else he has ever been.

The characters, he suggests, could travel to Calefact because of their official status, claiming that they wanted only to visit the scientists. While there, they could use ship sensors to find the stolen fuel.

In fact, the fuel on Dynam is inexpensive because it is subsidized by the

Navy, since only naval support civilians and relations of base personnel live there.

Calefact

The scientists are studying the plant life of Calefact, with no evidence of stolen fuel. However, about 250km from the scientist's research station, sensors pick up a large metal artifact.

Investigation of the site shows that the artifact is all that's left of a crashed starship, probably about 100 tons originally, but now only a melted lump of metal settled in the middle of a large crater. Living nearby is a belter, waiting for rescue from his misfortune.

The belter had misjumped into this system on his way to Uo, but the power surge from the misjump fused all of his ship's circuits. When he came out of jump space, quite close to Calefact, he found himself in an unknown location with all of his systems out. His ship started to fall toward the moon's surface before the Navy sensors could pick it up, and as it entered the atmosphere, the outer hull began to heat up.

The hapless belter was about to give up when he remembered that his "Belter's Partner" robot was grav powered and was still operational, since it operated on its own fuel cell power supply. He put on a vacc suit, gathered up a few supplies, strapped himself to the robot, and aimed it for the planet's surface. He used the robot as long as it lasted to help set up a makeshift shelter from the elements, but when its hydrogen ran out, he found himself quite alone on this small world.

He stayed near his ship's useless hull in the hope that other travellers might eventually pick it up on their sensors. He has been on the moon for about two and a half years. He had no idea that there were other humans only 250km away, and he knows nothing at all about any stolen fuel.

High Security

If Dr. Krenstein wants to nose around the data stored in the naval base computer, he must succeed at the following UTP:

To extract data from the naval base computer:

FORMIDABLE, computer, int, 10 min (hazardous)

REFEREE: If Krenstein fails at this task, he better have a real good story ready, unless he is eager to tour the depot's brig. (His robotics-5 skill is equivalent to computer-4.)

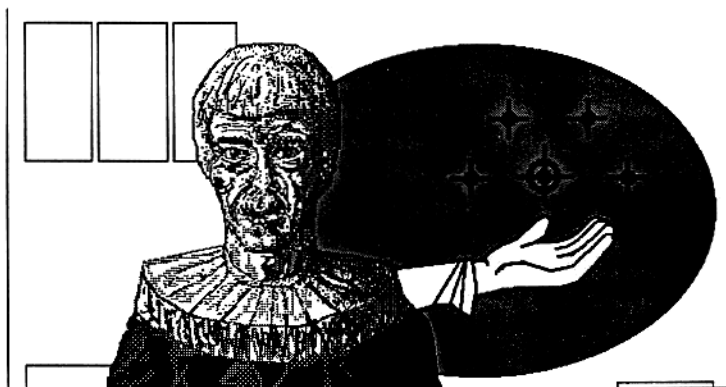
If Krenstein succeeds at this task, he will discover that there are two master files in the computer for use by the automated refueling program. In one of the files, 22 ships have been changed from a once-every-two-years to a once-every-two-months schedule. Actual fueling records do not show any

ships that are on the more frequent schedule. (These records have been falsified, but this is undiscoverable.) Since the refueling is performed by robots, a change in schedule could go unnoticed for some time.

Zid Rachele 411AC4 Age 120

Leader-6, Bribery-6, Jack of all trades-5, Computer-4, Forger-1

Zid Rachele escaped from Exile in 1015. He spent a number of years in Vargr space, hiding out and building a network of racist cohorts. He returned to Imperial space 28 years ago, travelling in his own ship and finalizing his plans for conquest. He has been in the Dynam system himself for 6 years; some of his confederates have been here much longer.



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AN OVERVIEW OF STARSHIP SENSORS

The EMS Array

All starships, both military and non-military, have EMS (electromagnetic spectrum) sensors. EMS sensors are an integrated sensor array, designed to sense and report on the entire electromagnetic spectrum. EMS sensors include both active and passive sensors.

Passive EMS sensors detect electromagnetic *energy sources*. Such energy sources include:

Long-wave radio: power line networks, lower end of the radio broadcast band.

Short-wave radio: broadcast FM radio, television, radar.

Microwave radio: m-radar (all-weather radar), microwave transmissions.

Heat/IR: any heat source, from very low-tech (TL 8 or less) starship maneuver drives to living beings.

Light: any visible light source, including low-tech (TL12 or less) lasers and ladar.

UV: ultraviolet light from stars, certain artificial lights, some special purpose lasers and ladar.

X-ray: high-tech (TL13 or more) lasers and ladar, some natural sources such as stars and gas giants.

Gamma: nuclear explosions and stars.

Passive EMS sensors can detect the source's intensity (faint, moderate, strong, dangerous, or fatal), duration (constant or intermittent), range, direction, and the number of sources in a source "point" (single source, multiple source, or network).

Active EMS sensors detect *objects* by reflecting the sensor's own transmitted electromagnetic energy. Active EMS sensors are classified by the type of electromagnetic energy they transmit:

Radar: general purpose object detection. Sensitive to disturbances in the transmission path (thus can detect some very tenuous "objects" such as debris, water vapor, dust clouds, sand, and the like).

M-Radar (microwave radar): "all-weather" radar. Has excellent penetration through disturbances in the transmission path.

Ladar: Line-of-sight laser "radar". Provides very precise images of objects already located by radar or m-radar.

Ranges Table

Close: 0—1m

Short: 1—5m

Medium: 5—50m

Long: 50—250m

Very Long: 250—500m

Distant: 500—5,000m

Very Distant: 5—50km

Regional: 50—500km

Continental: 500—5000km

Planetary: 5,000—50,000km

Far Orbit: 50,000—500,000km

Extreme Orbit: 0.5—5 million km

Interplanetary: 5 million km—1 AU

System: 1—1000 AU

Substellar: 1,000—100,000 AU

Stellar: 100,000 AU—1 parsec

Interstellar: 1—2 parsecs

Notes:

1km=1000m

1 AU=150 million km

1 parsec=3.26 light years=205,600 AU

1 light year=63,000 AU

Passive EMS Sensor Intensity Chart

		<i>Intensity at the Sensor, if the Range to the Source is...</i>				
<i>Intensity at the Source...</i>	<i>Planetary, Far Orbit, Extreme Orbit, Interplanetary</i>					
	<i>V. Distant or less</i>	<i>Regional, Continental</i>	<i>System, Substellar</i>	<i>Stellar, Interstellar</i>		
Faint	Faint	—	—	—	—	
Moderate	Moderate	Faint	—	—	—	
Strong	Strong	Moderate	Faint	—	—	
Dangerous	Dangerous	Strong	Moderate	Faint	—	
Fatal	Fatal	Dangerous	Strong	Moderate	Faint	
<i>Reception Delay...</i>	None	None	Minutes	Hours	Years	

Active EMS sensors can detect the object's number (single object, multiple object group, or debris), relative speed, relative movement (away from the sensor, toward the sensor, etc.), range, direction, acceleration (e.g., 2-G for starship), and approximate size (from 1 cm³ to world size and beyond).

Radar and m-radar sweep in all directions from the sensor, while ladar is a single aimed beam. Active sensors have one distinct disadvantage: they can give away your position. Ladar is better than radar and m-radar: ladar only gives away your position to your target. But you must have located your target precisely before you can use ladar.

The maximum practical range for active EMS sensors is far orbit (500,000 km); the range on passive EMS sensors is effectively unlimited given a strong enough source (see chart).

The Densitometer

Military and paramilitary starships typically mount a very sensitive mass detector called a densitometer. The densitometer, an outgrowth of gravitic technology, uses an object's natural gravity to directly measure the object's density (i.e., its mass per unit volume). Within certain limitations, an object's elemental makeup can be deduced from the three-dimensional densitometer image. The densitometer is a passive sensor.

The densitometer can either be used to do a pinpoint scan of an object whose position is known, or the densitometer can be used to do a density search in an attempt to locate objects. A density search can be for:

- A single pre-specified density class
- A group of density classes
- An approximate weight in a given volume

A density search is time consuming: it generally takes about 20 minutes. During this period, the densitometer performs and correlates a series of scans in all directions from the sensor.

A density search in a vacuum can locate the following:

A densitometer can determine the general density class of an object (vacuum (total absence of mass), gaseous, liquid, nonmetal solid, light metal, medium metal, heavy metal, or artificial grav field) and the approximate weight (in powers of 10: 1kg, 10kg, 100kg, etc.).

Densitometer Sensor Chart	
<i>Range</i>	<i>Can locate this size and larger...</i>
Planetary	Man-sized objects
Far Orbit	Starship size
Extreme Orbit	Starships over 10,000 tons
Interplanetary	Small asteroids (10 km)
System	Large asteroids (200 km)
Substellar	Planets (UPP 1+)
Stellar	Small gas giants
Interstellar	Large gas giants

an artificial gravity field, the only reading the densitometer will give is "artificial grav field". Beyond planetary range, artificial gravity fields can not be detected by a densitometer (artificial gravity weakens rapidly with increasing range).

Neutrino Sensors

Military and paramilitary starships also typically carry neutrino sensors to detect high energy sources.

A neutrino sensor detects the emission of subatomic particles from a source. From these emissions, it is possible to determine the type of power source (fission, fusion, antimatter, other), the output magnitude in energy points (in powers of 10: 1, 10, 100, etc.), and the range to the source. The neutrino sensor is a passive sensor.

When scanning for a power source the size of a starship power plant, the effective maximum range of a neutrino sensor is extreme orbit range.

SENSORS IN STARSHIP COMBAT

Because starship combat often involves great distances (up to 500,000 km), all starship weapons are heavily dependent on computers and sensors in order to aim with any accuracy. The starship gunner often simply identifies friend or foe to the computer: the computer tracks and reports the status of the target to the gunner. It is the gunner who gives the final order to fire at a specific target. The gunner may instruct the computer to alter its default aim if he believes the target location will differ from the computer prediction (at 500,000 km, there is nearly a two second delay before the weapon fire reaches the target).

A good gunner uses all the sensors he has at his disposal, so that his aim is as accurate as it can be. Different starship sensors provide different information: relying on only one sensor type invites disaster.

The sensor first capable of detecting an approaching starship is the neutrino sensor: the size of the approaching craft can be roughly approximated from the power plant energy point readings. As the approaching starship gets closer, the densitometer and EMS array can detect enough specific data to allow identification of the exact class of ship (tonnage, configuration, etc.).

A ship with a black globe screen is much more difficult to locate or identify; the

black globe effectively masks all emissions from the ship. A black globe that is totally on (with no flicker) can sometimes be detected by a watchful sensor operator as a "below background" neutrino sensor reading—effectively a "hole" in space totally devoid of any energy. The canny commander will flicker his black globe—thus allowing controlled energy emissions and rendering his ship invisible to any sensors. Any black globe is automatically detected at visual range, however.

Damage inflicted must be estimated by sensors when the target is beyond visual range. This can be circumvented by firing a round of missile probes (instead of an armed ordnance) and getting them through all the enemy's defenses—the information gained when this is successful is equivalent to being at visual range for purposes of assessing damage.

Another more risky technique is to have one ship stay at visual range and act as a spotter for calling in fire or assessing damage. While this technique works, it is a sure way to be chosen as a priority target by your enemy.

Integrating Sensors into High Guard Combat

The following modifications incorporate sensors into High Guard ship combat.

Add two new High Guard ranges: *visual range*, and *extreme range*. This means there are now a total of four different ranges in High Guard:

Visual Range (0 to 50 km)

Short Range (50 to 50,000 km)

Long Range (50,000 km to 500,000 km)

Extreme Range (500,000 to 5,000,000 km)

Explanation of ranges:

Visual Range: Minimal sensor aid is needed at this range—you can actually see your opponent. For most purposes, this range is identical to regular High Guard combat. You know all about your target ships; you can accurately assess what kind of damage you are giving your opponent because you can actually see the damage as you inflict it. At this range, your sensors can even detect internal explosions in your enemy's ship. Ships with operating black globes are automatically detected, although identifying the exact class of such a ship is difficult.

There are, however, two important limitations at this range:

- You can not use spinal mount weapons. Spinal mount weapons require moving the entire mass of the ship in order to aim—which is virtually impossible when the target is this close.

- If you hit a target with nuclear missiles, your own ships must also roll for radiation damage.

Short Range: Sensor aid is needed at this range, and aiming by sensors is very reliable. Also:

- You can no longer detect internal explosions at short range—only surface explosions and radiation damage. At this range, with active EMS you can detect the precise location of a surface explosion, although in so doing you automatically reveal your exact position to all ships at any range.

- The densitometer can detect enemy repulsors.
- The neutrino sensors can detect an enemy meson screen or nuclear damper if it is being fired upon (in active use). The enemy screen can not be detected if it is inactive (has no offensive fire against it).
- All the sensors combined enable you to determine the exact class of the target ship. The mounted weapons and screens are an educated guess, however, because the computer simply reports what is typically mounted on this class of ship. If the ship has ever been refitted with a different weapon mix, you could be in for a few surprises.

Long Range: Combat at this range begins to suffer from "fog of war" effects. Sensors can give readings that are difficult to interpret. Attacks become less reliable and may miss the target more often (the best weapons at this range are missiles). Also:

- Sensors can still detect radiation and surface explosions at this range. However, the exact location of a surface explosion is unknown (all you can tell is that there either was or was not a surface explosion). Internal explosions can not be detected.

- The neutrino sensors provide the energy point output of the target ship's power plant to the nearest power of 10.

- The densitometer provides the tonnage of the target ship to the nearest power of 10.

- You can not detect any of the target ship's defenses (screens, repulsors, etc.).

Extreme Range: This is beyond the range of all weapons and most sensors. At this range a lucky sensor reading can reveal the presence of an unknown ship:

- The neutrino sensors may detect the energy point output of another ship's power plant to the nearest power of 10.

- The densitometer may detect the presence of a starship 10,000 tons or more (if this is true, that's all you'll know: there's something out there, and it masses 10,000 tons or more).

With four ranges to keep track of, a slight change in range reckoning is in order. Mark a dozen or so lines on your playing surface, thereby dividing it into a series of bands. Then:

- Any ships in the same band are at visual range.
- Any ships one band apart are at short range.
- Any ships two bands apart are at long range.
- Any ships three bands apart are at extreme range.

Within each band, the ships are divided into battleline and reserve ships as usual. The side that gets initiative can move their ships; the side that does not

three bands away from any enemy ship (thus at extreme range). If your opponent has faulty sensor readings, he may not be able to get any information about the incoming ships. At the referee's option, dummy reinforcements are also possible.

Determining Sensor Effectiveness for the Turn

During the Initiative Phase, each side makes a sensor effectiveness task roll for each range (four rolls in all):

- At visual range: automatic
- At short range: SIMPLE (uncertain)
- At long range: ROUTINE (uncertain)
- At extreme range: DIFFICULT (uncertain)

The referee records the results of the uncertain task for each side and each range. If the result is:

TOTAL TRUTH: Every hit actually hits, and tell the attacker they were hits. All sensor information about the enemy ships is accurate.

SOME TRUTH: Every third hit misses, but tell the attacker they were hits. Some sensor information about unidentified ships is inaccurate (e.g., wrong ship class ID, or wrong power plant output, and so on).

If the attacker requests a ship agility estimate, tell him the wrong value for at least one ship, but over 50% of the values should be correct.

NO TRUTH: Every other hit misses, but tell the attacker they were hits. Sensor information about unidentified ships is completely wrong.

If the attacker requests a ship agility estimate, tell him the wrong value over 50% of the time.

In all cases, hits against ships using active EMS always hit.

Other Sensor Notes

- Incoming meson fire is difficult to detect until it actually hits you unless you have a meson screen. You can detect incoming meson fire when it hits your meson screen if you have neutrino sensors.

- All starships carry transponders. Transponders actively transmit the ship's identification; this transmission is electromagnetic energy, essentially identical to using active EMS sensors. Military and paramilitary starships can turn off the transponder signal at any time.

Civilian starships can not turn off their transponder—tampering with a civilian starship's transponder so that it can be turned off is a crime at most starports. Falsifying the transponder ID of any starship (civilian or otherwise) is also quite illegal.

In any event, an approaching vessel with no transponder ID must be assumed to be a hostile vessel.

Putting It all Together

To properly incorporate these rules into a High Guard battle, the referee needs to make a few changes in how he does things.

First and foremost, all combat results are hidden from the players. The referee should set up a screen and make sure all the combat rolls are hidden from view.

Second, get a big stack of index cards. Use the cards to communicate battle results and sensor readings to the players. If the battle has multiple players on a side, recommend they also use the index cards for communication, or at least leave the room while discussing battle plans, so opposing players do not discover the strategy to be used.

It is possible to play a battle without a referee if the defending player acts as the referee for the attacking player. Within the restrictions of the uncertain task the defender can mislead the attacker when reporting damage or sensor results.

A High Guard battle using these sensor rules takes on an exciting new level of realism. The players sometimes find it hard to know just what's going on, and the opportunity for them to pull tricks on their opponents can result in a delightful session of starship combat.

The Order of Battle for this Adventure

The Racheleans have secretly reactivated 22 very large starships:

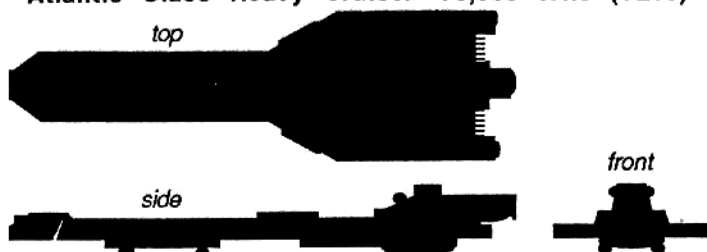
- 20 *Atlantic* class heavy cruisers
- 2 *Regal* class battlecruisers

The naval depot has the following forces:

- 18 *Scorpion* class SDBs
- 50 *Wasp* class SDBs
- 1 Base ship complex (see notes below)
- Deep site meson guns on Cryomet (see notes below)

—continued on page 31

Atlantic Class Heavy Cruiser—75,000 tons (TL15)



CR-Q4459J3-A66900-909N9-0 MCr47,544.71 75ktons
 batteries bearing Y G 51P TL=15
 batteries Z M 61W Crew=492
 Cargo=200. Fuel=36,750. EP=6,750. Agility=5. Troops=0. (Y=41. Z=55)

Tonnage: Q (75,000) *Spinal:* N meson
Configuration: 4 (Close Structure) *P Accel:* 9 (batt-6, bearing-5)
Armor: A *Missile:* 9 (batt-30, bearing-23)
Maneuver: 5 Agility=5 *Beam Laser:* 9 (batt-21, bearing-16)
Jump: 4 *Sandcaster:* 6 (batt-55, bearing-41)
Energy Points: 6750 *Nuclear Damper:* 9
Computer: 9fib *Meson Screen:* 6
Crew: 492 (7x70)

Regal Class Battlecruiser—75,000 tons (TL14)



BC-Q1466H3-196608-999S9-0 MCr62,243 75,000 tons
 batteries bearing 8 4 848 18 TL=14
 batteries A 5 A5A1A Crew=610
 Cargo=372. Fuel=34,500. EP=4,500. Agility=1. Troops=500. Low=550.

Tonnage: Q (75,000) *Spinal:* S meson
Configuration: 1 (Needle/Wedge) *P Accel:* 9 (batt-10, bearing-8)
Armor: 1 *Missile:* 9 (batt-10, bearing-8)
Maneuver: 6 Agility=1 *Beam Laser:* 9 (batt-10, bearing-8)
Jump: 4 *Energy Weapons:* 9 (batt-5, bearing-4)
Energy Points: 4500 *Sandcaster:* 9 (batt-10, bearing-8)
Computer: 8fib *Repulsor:* 8 (batt-5, bearing-4)
Crew: 610 (8x76) *Nuclear Damper:* 6
Meson Screen: 6

Aenoegrr Class Strike Cruiser—7000 tons (TL13)



CS-G222FG2-107300-080E7-0 MCr9,642.58 7,000 tons

batteries bearing 4 15 TL=13

batteries 4 15 Crew=77

Cargo=0. Fuel=2,450. EP=1050. Agility=1. Troops=0.

Tonnage: G (7,000)

Spinal: E meson

Configuration: 2 (Cone)

Missile: 7 (batt-5, bearing-5)

Armor: 1

Energy Weapon: 8 (batt-4, bearing-4)

Maneuver: 2 Agility=1

Nuclear Damper: 3

Jump: 2

Meson Screen: 7

Energy Points: 1050

Computer: 7fib

Crew: 77 (11x7)

Oegveng Class Gunned Corvette—800 tons (TL13)



LG-8125CG2-147100-60000-0 MCr1,077.67 800 tons

batteries bearing 1 1 TL=13

batteries 1 1 Crew=19

Cargo=0. Fuel=352. EP=96. Agility=5. Troops=0.

Tonnage: 8 (800)

Pulse Laser: 6 (batt-1, bearing-1)

Configuration: 1 (Needle/Wedge)

Sandcaster: 4 (batt-1, bearing-1)

Armor: 1

Nuclear Damper: 1

Maneuver: 5 Agility=5

Meson Screen: 7

Jump: 2

Energy Points: 96

Computer: 7fib

Crew: 19 (19x1)

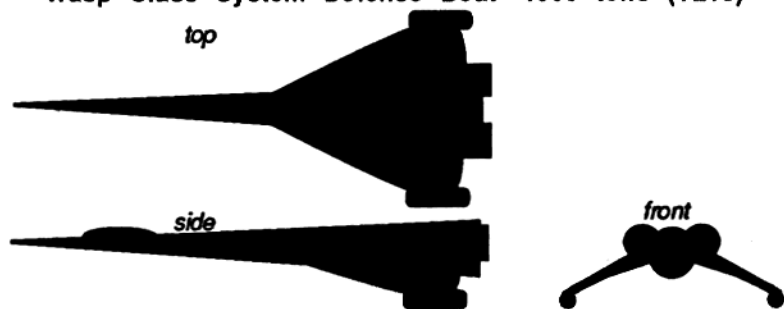
Scorplon Class System Defense Boat—2000 tons (TL15)



SDB-B106LJ2-A89900-09709-0 MCr2,365.42 2,000 tons
 batteries bearing 1 11 2 TL=15
 batteries 1 11 2 Crew=28
 Cargo=200. Fuel=400. EP=400. Agility=6. Troops=0.

Tonnage: B (2,000) **Missile:** 9 (batt-2, bearing-2)
Configuration: 1 (Needle/Wedge) **P Accelerator:** 7 (batt-1, bearing-1)
Armor: A **Energy Weapon:** 9 (batt-1, bearing-1)
Maneuver: 6 Agility=6 **Sandcaster:** 8 (batt-1, bearing-1)
Energy Points: 400 **Nuclear Damper:** 9
Computer: 9fib **Meson Screen:** 9
Crew: 28 (14x2)

Wasp Class System Defense Boat—1000 tons (TL15)



SDB-A106MJ2-A59900-60009-0 MCr1,341.28 1,000 tons
 batteries bearing 1 1 1 TL=15
 batteries 1 1 1 Crew=20
 Cargo=50. Fuel=210. EP=210. Agility=6. Troops=0.

Tonnage: A (1,000) **Missile:** 9 (batt-1, bearing-1)
Configuration: 1 (Needle/Wedge) **Pulse Laser:** 6 (batt-1, bearing-1)
Armor: A **Sandcaster:** 5 (batt-1, bearing-1)
Maneuver: 6 Agility=6 **Nuclear Damper:** 9
Energy Points: 210 **Meson Screen:** 9
Computer: 9fib
Crew: 20 (20x1)

continued from page 27—

Base Ship Complex: This consists of several old starships linked into a makeshift orbital complex. The complex has at its disposal the following:

- 25 factor 9 missile batteries; 17 bearing
- 40 factor 7 pulse laser batteries; 28 bearing
- 1 factor P meson spinal mount
- 1 factor R particle accelerator spinal mount

The base complex has a very good central "Battle HQ room", which gives the naval depot players a +4 for fleet tactics when rolling for initiative.

Cryomet Deep Site: Two factor P meson guns are in a deep site on Candescene's sister moon, Cryomet. Treat these guns as always long range.

The Plan

The Racheleans intend to steal the 20 *Atlantic* class ships intact. The two *Regal* class battlecruisers are older (tech level 14) and will form the battleline during the battle, allowing the *Atlantics* to remain in reserve and run for it.

In order to prevent detection until now, the starship power plants have been running at their minimum level (effectively a power plant number of 0.5). As the Racheleans make their move, the power plants will be up to level 1. Each turn, the Rachelean ships can increase the power plant level by one number. If the Racheleans can reach level 4, at the end of the second turn at this level, their ships can break off by jumping.

On the other hand, if the Racheleans can gain the initiative for two consecutive turns and move from visual to long range, the ships in the reserve can break off by acceleration (agility 5 plus bonus of 2 for being in reserve gives a breakoff agility of 7). Prior to attempting a breakoff by acceleration, all Rachelean ships have an agility of 1.

Because of crewing problems, none of the ships have spinal mounts that work, and each ship has only one battery of one weapon type (referee's choice) that functions. The only exception to this is the two *Regal* class ships. Since their only purpose is to act as a battleline screen, two batteries of each weapon can fire. The *Regals'* spinal mounts are not functional, however. The *Regals'* jump drive does not work either, since it was never intended that they should do anything except perform a delaying action.

If neither *Regal* can act as a battleline screen, the Racheleans will pull one *Atlantic* from among the *Atlantics* in reserve to become the battleline. The Racheleans will repeat this as often as necessary.

The Racheleans expect the Imperial SDBs to use nuclear missiles against them. Because of this, the nuclear dampers on each ship were given priority during the reactivation: all Rachelean ships have nuclear dampers operating at their full level.

Prior to "pulling out" with the stolen ships, the Racheleans have three goals

- Immobilize the base complex weapons.
- Immobilize the base's battle room (otherwise the Imperials get a +4 on fleet tactics when determining initiative).
- Immobilize the deep meson site on Cryomet.

The referee should just assume the Racheleans succeed with these three goals, otherwise the battle becomes a turkey shoot heavily weighted in the Imperials' favor. While Zid and his followers are bold, they are not stupid: they will only attempt their theft if they feel they stand a chance of succeeding.

The referee should emphasize the defenses of the depot, to the point of making the players overconfident. Then when the battle starts, the conversation with the players (who are acting as the SDB commanders) might go something like this:

Players: "Those Racheleans are fools—we'll just shoot them out of the sky with the base's spinal mounts."

Referee: "You seem to have lost radio contact with the base."

Players: "Well then, we'll blast them with the meson guns on Cryomet."

Referee: "Uh...they don't seem to be responding either..."

About here, the players will realize that stopping the Racheleans may not be so easy after all. The referee should also worry the players by reminding them that the Rachelean ships are equipped with spinal mounts. (No need to tell them that they are not functional.)

As the stolen ships start to move out, Zid Rachele comes on the base complex's monitors. He is a feeble looking old man; behind him is a garish banner bearing an unfamiliar symbol. He pronounces the following message in Vilani, instead of the more commonly spoken Galangic:

"My name is Zid Rachele. I hereby proclaim the founding of the Fourth Imperium, and I further claim all ships and personnel at this installation as my lawful property. If I am interfered with in any way, I will take whatever actions are necessary to enforce my will. If I am not interfered with, I will leave this installation at peace until my return."

The battle begins with all ships at visual range, and the Racheleans automatically have the initiative for the first round (however, the Racheleans can not move in the first round, so the only benefit they get from having initiative is in attacking with the two *Regal* class ships in their battleline).

Help for the Underdog

As discussed earlier in the adventure, Zid Rachele contracted with some Vargr corsairs to act as a diversionary force, thereby aiding his escape. Whether or not the Vargr will arrive on schedule is a matter of some speculation among the Racheleans.

The best way for the referee to handle the Vargr is to bring them in only if the

players will lose—which will ruin the session for them. The referee should strive to make the battle seem challenging, with an eye toward subtly manipulating the battle so the players have a good chance of stopping Rachele and his gang. Victories are satisfying; hard-fought victories are even more so.

The Vargr force:

- 3 *Aenoegr* class strike cruisers
- 8 *Oegveng* class gunned corvettes

Because of the new sensor rules, these ships are placed on the playing surface at extreme range. They have no transponder IDs, and it is up to the players to succeed at their extreme range sensor roll in order to find out about these ships.

If, even after the Vargr force has arrived and gotten actively involved in the battle, Zid starts to lose badly, he will announce to the Imperials that the new ships are Vargr, and will insist that the Imperials attack the Vargr instead of him.

Final Notes

If your players really go in for starship battles, they should enjoy this adventure, and will probably want to fight the battle with the full order of battle. If your players are not into starship battles at all, concentrate on the role playing part of the adventure, then just make up a battle result you like and tell it to the players.

It is also possible to fight a reasonable subset of the battle and assume that the outcome of the subset represents the outcome of the entire battle.

You know your players—tailor the adventure to what they prefer.

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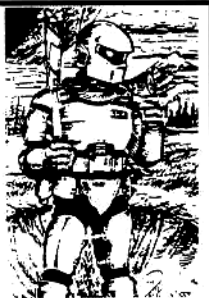
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THE DYNAM SYSTEM

In the early years of the Third Imperium, the Dynam system bustled with belter activity. However, from 400 to 500, rich finds became so scarce that by 520 only a few beltlers remained.

After the civil war (in 690), the Imperial Navy established a Naval Depot on the gas giant moon Cryomet in the Dynam system. Many of the naval personnel moved their families to Dynam itself—only a few hours away by ship's boat.

The Navy sometimes mothballed obsolete starships from the Lishun sector forces in a parking orbit circling the small inner moon of Candescene. The deep meson gun site on Cryomet coupled with the system's heavy Naval patrol forces acted as a considerable deterrent to would-be starship thieves.

Over time, the Navy found the Dynam facility costly to maintain in comparison to its military value—the only significant military activity in the Lishun sector being an occasional pesky Vargr band. In 940, after 250 years of operation, the Navy decided to wind down the depot operations on Cryomet. Over the next 50 years, the Cryomet Naval Depot went through a series of phased cut-backs.

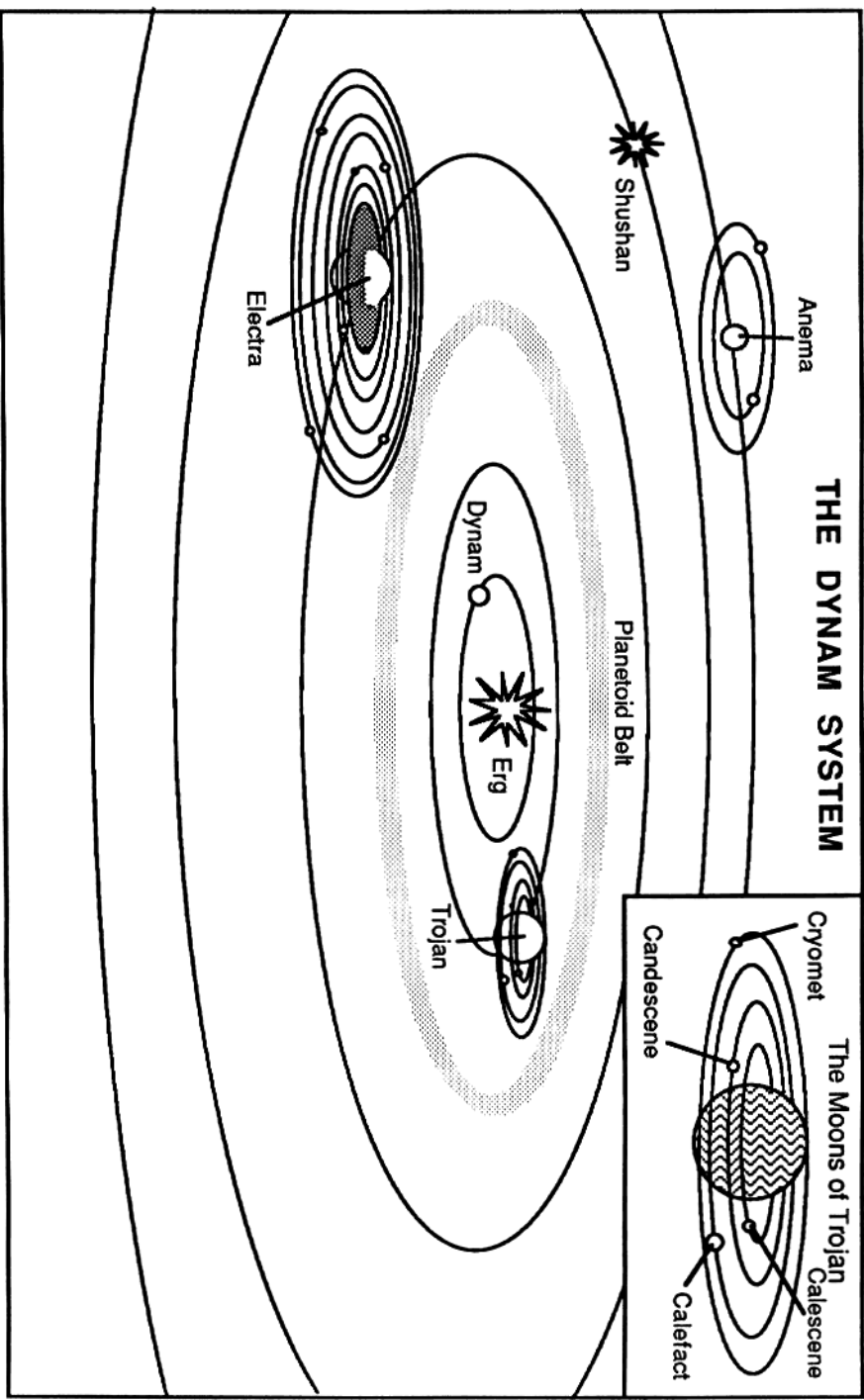
However, at the close of the Third Frontier War, over 150 obsolete starships from the Spinward Marches were brought into the system, and mothballed in orbit around Candescene. Because of its location and defenses, Naval officials felt the Dynam system to be an excellent location to store the valuable ships.

After the Solomani Rim War, the Navy transferred another 300 old naval warships to Candescene. By 1010, all original depot facilities on Cryomet were shut down except for the deep meson gun site.

Over 1000 mothballed starships orbit Candescene as of 1100. A heavily-armed system defense boat force constantly patrols the system.

<i>Orbit</i>	<i>Name</i>	<i>UPP</i>	<i>Remarks</i>
Primary	Erg	M0 V	
*1	Dynam	D788367	7 M Military Base.
2	Trojan	Small GG	
9	Calescene	Y300000	0
11	Candescene	C210365	D D Military Base. Current Naval Depot.
35	Calefact	Y756000	0 Science Research Station.
45	Cryomet	G500169	D M Military Base. Old Depot Facilities.
3	Planetoid Belt	G000000	0 Abandoned belter spaceport.
4	empty orbit		
5	Electra	Small GG	
1	Ring	YR00000	0
4	Pyros	Y410000	0
7	Radia	Y701000	0
9	Calea	Y310000	0
10	Tepe	Y700000	0
11	Torre	Y100000	0
30	Teura	Y420000	0
45	Tropa	Y420000	0 Companion.
6	Shushan	F7 VI	
7	Anema	Y500000	0
3	Aama	Y310000	0
10	Nipuum	Y300000	0

THE DYNAM SYSTEM



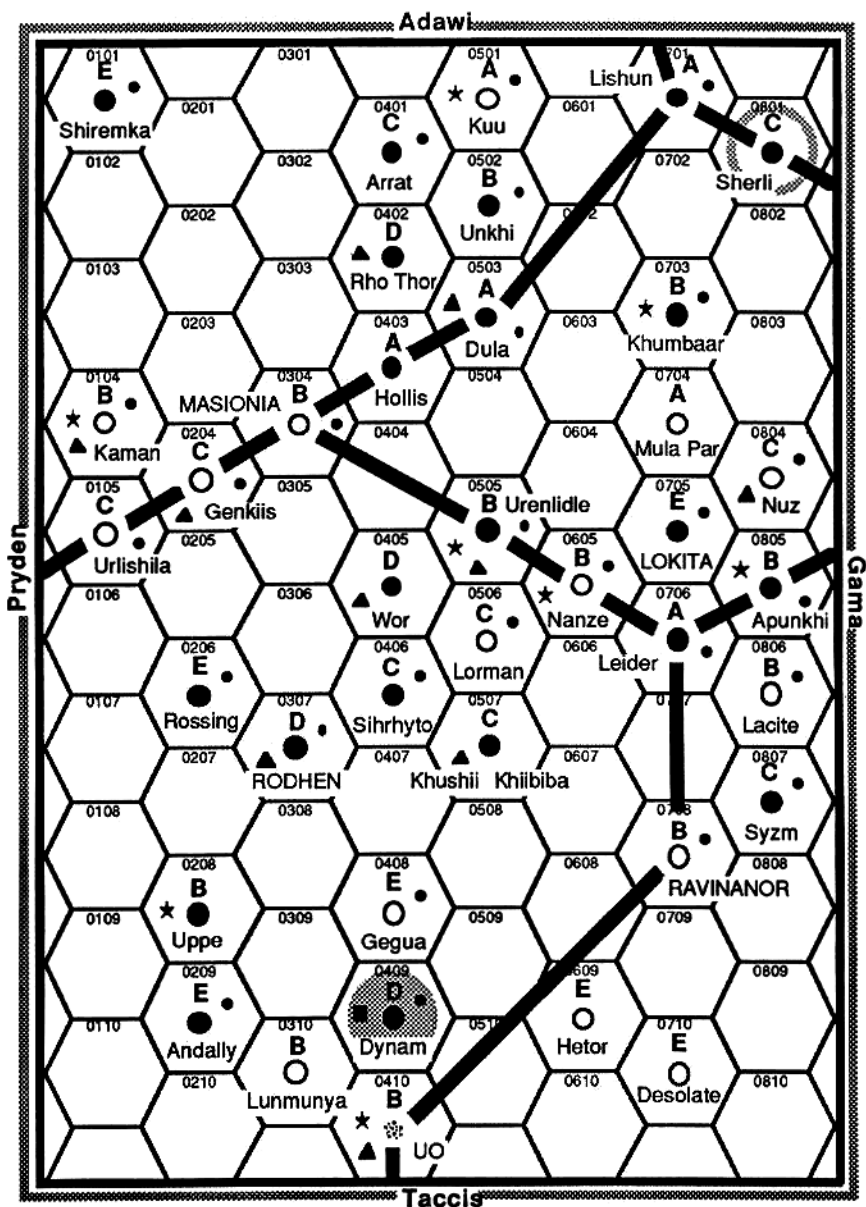
The Masionia Subsector

The capitol world of the Masionia subsector (subsector F of Lishun Sector) was decimated by incompetent leadership during the Rule of Man. Edgar Masionia, the Solomani ruler assigned to the world, stood by while the scant water resources of the world dried up and the thin atmosphere was tainted by industrial pollutants. When the Third Imperium was established, Masionia was made subsector capital to atone for its earlier mistreatment. Anti-Solomani sentiment there is still strong.

Dynam is the site of a Naval depot, where more than 1,000 fighters and starships are stored. Because the system is interdicted by the Navy, the Gegua system is effectively cut off from interstellar trade at jump-1.

Name	Location	UPP	Bases	Remarks	
Shiremka	0101	E423521	9	NonInd. Poor.	G
Kaman	0104	B515034	D	B NonInd. Ice-capped.	G
Urlishila	0105	C560867	7	Rich. Desert world. Owned by Kaman.	G
Genkiis	0204	C8B8574	A	S NonInd. Fluid hydrosphere.	G
Rossing	0206	E6A3363	5	NonInd. Fluid hydrosphere. Owned by Rodhen.	G
Uppe	0208	B685202	E	N NonInd.	
Andally	0209	E884869	7	Rich. Owned by Uppe.	G
Masionia	0304	B130943	C	NonAg. Poor. Desert world. Subsector capitol.	G
Rodhen	0307	D443A86	D	S Industrial. Poor.	G
Lunmunya	0310	B410444	D	NonInd.	
Arrat	0401	C896334	7	NonInd.	G
Rho Thor	0402	D555567	7	S Agricultural. NonInd. Owned by Dula.	
Hollis	0403	A788555	D	Agricultural. NonInd.	
Wor	0405	DA89675	5	S NonInd. Rich.	
Sihrhyto	0406	C876354	9	NonInd.	G
Gegua	0408	E130553	B	NonInd. Poor. Desert world.	G
Dynam	0409	D788367	7	D NonInd. Military Rule.	R G
Uo	0410	B000A98	F	B NonAg. Industrial. Asteroid Belt.	
Kuu	0501	A420599	G	N NonInd. Poor. Desert world.	G
Unkhi	0502	B693366	B	NonInd. Owned by Dula.	G
Dula	0503	A621863	F	S NonAg. Poor.	G
Urenidle	0505	B445124	E	B NonInd.	G
Lorman	0506	C7C5725	A	Fluid hydrosphere.	G
Khushii Khiibiba	0507	C254354	B	S NonInd.	
Nanze	0605	B210677	9	N NonAg. NonInd.	G
Hetor	0609	E300368	B	NonInd. Vacuum world. Owned by Ravinanor.	
Lishun	0701	A5858C8	D	Sector capitol.	G
Khumbaar	0703	B797402	C	N NonInd.	G
Mula Par	0704	A350243	G	NonInd. Poor. Desert world.	
Lokita	0705	E528A97	D	Industrial.	G
Leider	0706	A6898AB	F		G
Ravinanor	0708	B9C69BD	C	Fluid hydrosphere.	G
Desolate	0710	E9D3358	7	NonInd.	
Sherli	0801	C448444	7	NonInd.	A
Nuz	0804	CAEA453	E	S NonInd. Global fluid hydrosphere.	G
Apunkhi	0805	B836275	9	N NonInd.	G
Lacite	0806	B6B2501	F	NonInd. Fluid hydrosphere.	G
Syzm	0807	C242543	7	NonInd. Poor.	G

The Masionia subsector contains 38 worlds with a total population of 114.635 billion. The highest population is 65.2 billion at Rodhen; the highest tech level is G at Mula Par and Kuu. All worlds are members of the Imperium.



Masionia Subsector

Subsector F of the Lishun Sector

THE FUTURE OF TRAVELLER: An Interview with Marc W. Miller

by Gary L. Thomas

To understand **Traveller**, and to understand where the game is going, one direction points the way: toward Marc Miller, the game's principal designer. **Marc Miller is Traveller**. As **Traveller** approaches its tenth anniversary, I talked with him to find out where the game is headed.

This is one game designer who is easy to get to know. "Call me Marc," he says with a laugh. "I'm not a very formal person. I never wear a suit and tie. Nobody calls me Mr. Miller."

The Early Days

Marc got into gaming at Illinois State University, located in the central Illinois town of Bloomington-Normal. It was 1972, Marc was fresh out of the Army, and 24 years old. "I wandered through here," he says, "and I bumped into the ISU Games Club, which was Frank Chadwick and Rich Banner. That's all it was. I was going to school on the GI Bill, with no real ambition, no real purpose in my studies, and I had a lot of time to play games."

Marc learned through the Games Club how to play such classic war games as **France: 1940** and **Red Star White Star**. He also learned to play **D-Day**, an Avalon-Hill game that he had bought for himself in 1961, when he was only 14. When he first tried it, he had no knowledge of military strategy or tactics, and the game didn't teach these, so he set it on a shelf where it sat around "as a treasured game that I owned, but I never even tried to play it again. But once someone showed me how to play these games, I understood. It was real easy."

He was immediately addicted, and became a regular at the Games Club. "I would wander into the Student Union at three or four in the afternoon and I would stay there until two or three at night. We were basically talking, writing, playing games. Designing games. Having fun. It got to the point where we kept our blank hex sheets behind the photocopy machine in the Union and nobody bothered them—it was ours."

But even though college life for Marc held its share of fun and games, there was work involved, too. He and the others convinced ISU to fund them as game designers, and then produced games to specification for instructors for use as classroom teaching aids. This lasted only a year and a half. "The big problem with any academic profession is that you have to have your academic credentials, and we didn't. We were undergraduates designing games to help degreed instructors teach their courses."

Game Designers' Workshop is Born

The university community was less than excited about this, and the funding expired. This was no setback to Marc or the others. "Our group was never one to stand still, and we soon turned it into a going concern." In 1973, they decided to publish **Drang nach Osten**, a game they had already designed about Hitler's push toward the Russian front.

"That was our first commercial product, and it came out close enough to the twenty-second of June of 1973 for us to call that our birthday, and we celebrate that as GDW's birthday as also the date of the invasion of Russia by the Germans."

Toward a Science-Fiction Role-Playing Game

GDW continued to publish games. Within a short time, it published its first science-fiction board game, **Triplanetary**, but apart from that GDW remained a historical game company for a long time.

This didn't mean that the group wasn't interested in science-fiction games. A little later, they did a series of science-fiction board games: **Belter**, **Double Star**, **The Bloodtree Rebellion**.

Then came their first role-playing game, **En Garde**.

"That established that we could do a role-playing game without stepping on other people's toes. When TSR came out with **Dungeons & Dragons**, it was the only role-playing game. A lot of people at the time were doing **D&D** knockoffs, but our game was different. TSR has even held **En Garde** up as an example of how someone can go about doing a role-playing game without ripping off **D&D**."

In late 1976, Marc realized that there was no science-fiction role-playing game, and he wanted to see one. He started writing his own in early 1977, worked on it until June, and the game was published later that month as a boxed three-book set. **Traveller** was born.

The Growth of Traveller

It took GDW some time to realize what a role-playing game required. "When we first put out **Traveller**, we treated it as a role-playing game much as we treated TSR's **D&D** as a role-playing game: a set of three books that told you what you wanted to do. With **Traveller**, we just took our time, whatever time we needed, and created role-playing scenarios for it. We played it around the office, ran campaigns, and had a good time."

"What we didn't realize is that most people have 9 to 5 jobs and can't take the time to do that. If you look at the original three-booklet set, it did not create a background, except what was necessary for the rules. We started creating things like the Imperium, the background against which we were playing, and that's when things really started to take off. We were doing very good sales on **Traveller** even without a background, but the background gave reason for people to buy things."

"I'm not the only one who has been doing **Traveller** material. One of the things that helps us here is other people, who have their expertise in other things. *Mercenary* was done by Frank, because he wanted to do it. Some of the adventures that have been done were done by other people because they wanted to do them, and they brought more expertise to it than I could. **Traveller** has been the result of the work of a lot of people."

Marc himself has learned a lot since those times, too. "I've lived 10 years since I designed **Traveller**, and I know things now that I could not find then. For example, the world generation system needs more stats, it needs more information. The range of information that it produces is not as wide as the range of possible encounters. Essentially, the worlds produced are breathable atmosphere oxygen worlds, and there are far more worlds than that."

Another lack of the game, he says, is its reliance on one world per system. "This is conducive to a large-scale interstellar society, but it certainly seems to waste a lot of worlds. There are other problems with the game, too, and some of them are plot problems. If I had it to do over I think I could do a 1,000 percent better job knowing what I know now, simply because role-playing has advanced in the past 10 years."

A Fresh Start

This awareness of **Traveller's** shortcomings has pushed the GDW crew to revise it, but Marc is wary of doing more than just cleaning up the rules. "I'm reluctant to do anything that would revise the game because it's such an entrenched system that so many people are happy with. At the same time, the system is 10 years old." Other systems are now better, he concludes, and there's really only one way out.

"So, after resisting a revision of **Traveller** for some time, we finally came to the conclusion that we should do a new science-fiction role-playing game, which is not dealing with the Imperium or any of the concepts that we had before."

Marc and his cohorts at GDW already had a strong, popular system to build on, but they didn't want any preconceived notions to hold them back. "We committed ourselves to making the best state-of-the-art role-playing game available, the best science-fiction role-playing game there could be, no matter where it would go. We didn't want to set it in the same universe as **Traveller**, we didn't want to confine ourselves to anything that **Traveller** has done before. We just wanted to come up with a system that people would really like."

"The Game"

"We have had great success with **Twilight: 2000** as a role-playing game set at the turn of the century; the World War III background appealed to people immediately. So we decided to set the new game into the **Twilight: 2000** universe 300 years ahead and call it **Traveller: 2300**.

"Travel is the source of adventure, and the players are travellers, so we kept

the name **Traveller**. I am always careful to say that **Traveller: 2300** is not advanced **Traveller**, it's a different game. It shares the name with **Traveller**, because **Traveller** is the name of science-fiction role-playing."

So a year ago September, on the ominous day of Friday the 13th, eight people from the staff and warehouse workers of GDW met in the warehouse to start playing what they called "The Game".

"We created comprehensive (if sketchy) rules on how the world works on a national basis: politically, diplomatically, economically, and militarily. We created a map of the world broken into regions, not necessarily the size of countries. We analyzed all of those regions by what is known or potentially there for natural resources, industry, population, food production, everything else.

"Once we had that set up, we stepped through **Twilight: 2000's** World War III, starting in 1995. From there, the eight players, each with three countries, started playing in 10-year turns until 2300. It wasn't easy, but the course of development of 300 years produced a realistic view of what the world is like. The world in **Traveller: 2300** is not a nation, but an accumulation of nations, each competing for access to the universe. There's a lot of room for conflict on Earth, as well as up in the stars. And that's the basic concept behind **Traveller: 2300**."

The Future of Traveller

Marc doesn't expect to lose **Traveller** players to the new game. "I think that a lot of people are playing **Twilight: 2000**, and I think we're going to get a lot of them switching over.

Some people think that **Traveller: 2300** will push **Traveller** to the sidelines, but look at history. **D&D** was not pushed out of the way when TSR came up with **AD&D** or its other role-playing games. **Traveller** did not get pushed out of the way when we came out with **Twilight: 2000**."

"**Traveller** should not die just because a new role-playing game has come in. I think the two systems can complement each other even though the new system is state-of-the-art. In its own way, the old system is better than the new one, because it operates in a different arena. Just as Niven's and Asimov's two systems can coexist in science-fiction, the two games can both exist side by side because one is far ranging and the other is confined.

"**Traveller** is 10 years old and not at its peak. But we don't throw something away just because it is not at its peak. If **Traveller** were to die, then we would be throwing away something we put 10 years of work into."

New Traveller Releases Planned in the Months Ahead

In fact, there are several new **Traveller** products scheduled for release this coming spring.

Darrians will describe this minor human race in a format similar to that used in

The Spinward Campaign.

An adventure module on trade, commerce, and piracy in Illeish Sector will be published, including a map of the sector.

Sometime in the first half of 1987, GDW will publish an advanced **Traveller** combat system, combining the best of *Striker* and *Azhanti High Lightning*.

Other improvements to the support of **Traveller** continues. "We have put into place a program to upgrade the quality of *Challenge* magazine and its content on **Traveller**. When *The Journal of the Travellers' Aid Society* was merged into *Challenge*, half of the pages were reserved for **Traveller**. Currently it's getting more than that, and the quality of the articles is really high. The last few issues have really shown that."

So You Want to Become a Game Designer...

Marc doesn't mind giving advice about his profession. "I wrote a letter to a 13-year old last week, who asked me how to learn to do what I do. Basically I told him, and I tell anybody who asks that question, if you're 13 years old, you've got high school and college ahead of you. That doesn't stop you from playing in games or writing games and scenarios right now. I have seen the work of 14-year olds get published. I have seen the work of 14-year olds get close to publication, and that's better than a lot of adults get.

"But in the meantime, if you don't do the work, you're never going to get anywhere. You can't walk into a game company and say, 'I want to be a game designer, train me to be a game designer.' They're going to want you to come in and be one, and be able to do game designs immediately. You're going to have to do them part-time or on your own time, and then when you do, once you've got a game published, if it's any good, a game company will treat you as a game designer.

"But you need a lot of judgment, a lot of background along the way, and high school and college do that." Several topics of study are especially germane to the budding designer, he says. "I took a variety of courses in college. A historical game designer needs to have access to languages. A science-fiction designer has to know science. It doesn't matter whether your real strength is in biology or physics, but you have to be able to do it. You have to be able to handle math."

The Business World

"The courses that I didn't take that probably would have helped me are business courses, because any game designer is going to get involved in the business, the advertising, the merchandising of games. He can't help it. Most game designers are self-employed. Half of those who aren't self-employed work for game designers who are self-employed, and they will be called upon to write advertising copy, to do good writing, to keep accountings, or to do merchandising. I don't think it hurts to know how to give business advice.

"If the ball falls out of your court, you can always use those skills in the real world. That's my advice to anybody: don't think that game designing is going to take you out of merchandising. I've known too many people who have designed a game, and had it produced, and have them sitting in their garage, and they can't sell them because they can't get anybody to pay attention to them.

The Future of Traveller is Secure

There's a certain quality, besides his skill at game design, that stands out in my mind as the distinctive part of Marc Miller's personality. It took me a while to realize just what this was, but when I discovered it I knew "the future of **Traveller**" was secure.

"I was over at the ISU library just an hour ago," Marc told me on a hot August afternoon. "I was getting some maps, and I was thumbing through the tray of maps of the universe. I thought to myself, 'Wouldn't that be nice if one of our maps was in here?' And there it was, the Imperium map from **Traveller**, right in there, between star maps and maps of the world. Someone had seen fit to get it over there and put it in the drawer. A pleasant spot."

Listen to the tone of Marc's voice in this explanation of **Traveller's** best feature. "The real joy of **Traveller** is almost a secret: that it can be played as a solitaire game. A kid comes home from school and fools with his **Traveller** stuff for a couple hours, and puts it in a file folder. Then when Saturday rolls around and he plays **Traveller** with his friends, that stuff is all there. He can design ships, he can design animals, he can generate characters, he can design systems and worlds.

"He can do all kinds of things for hours on end, and he can enjoy doing them. That's got a double value, because it's solitaire play, but it's also preparation for face-to-face play. You don't lose the value, just because you played solitaire and enjoyed it. You don't lose anything."

Finally, I asked Marc how he wanted to be remembered in 100 years, and there was no hesitation at all in his voice. "I want people to say that I designed **Traveller**. I can't think of a better thing to be thought of."

What this boils down to is a love for one's vocation. Most people I know hate their jobs, and wish that they did something else for a living. In contrast, Marc W. Miller is a man who immensely enjoys what he does, and it shows up in his attitude toward his games. "I expect I'll still be doing this when I retire. I like to design games. I enjoy it. I can see what I'm going to be designing two years from now, three years from now, and five years from now, I can see some of what I want to be designing. The rest of it I'll learn along the way."

As long as Marc keeps this attitude toward life and what he does, we can be sure of seeing a continuing line of quality **Traveller** products published during the game's *next* 10 years.

Library Data of the Lishun Sector

Vakkuun	Adawi	Sotri	Criideu
Pryden	Masionia	Gama	Tephany
Shuna	Taccls	Simen	Ot Zell
Shuun	Welling	Strashna	Mirmida

Lishun: Subsector Key

Amsa/Pryden(0429B-220310-B): Mak-hidkarun retires its top executives to Amsa for their health. Domed parks surround the homes, where the low gravity prolongs life and makes activity easier. Servants and medical personnel serve two-year terms.

Gegirur/Vakkuum (0808 C-200774-A): Population expansion has outstripped the resources of this tiny world. A dispossessed class now lives by scavenging in small ATVs with tightly closed recycling. Piracy against the older domes is common. Dome population is also split into three factions, contending for control of the underground aquifers that supply all the planet's usable water.

Jebiina/Adawi (1308B-743400-F): Jebiina is a boom world in the midst of a plain old-fashioned gold rush. At the same time, since Jebiina has no government, a "free land" rush is attracting dissatisfied residents of Adawi/Adawi (1408 A-794AB9-F). Leaving Adawi is legal, but re-immigration is prohibited. The taint of Jebiina's atmosphere consists of various gases from volcanoes; their concentration is insufficient to discourage outdoor activity. Participating in either rush is dangerous, but the rewards can be more than worth it.

Khoez-toeng-thos/Adawi (1304 A-8C9740-9): The alleged "colonization" of this planet by Vargr using "orbital complexes" (actually just big starships) isn't fooling anybody. Imperial military experts believe the Vargr are using the world as an advance base, since Khoez-toeng-thos just happens to be adjacent to some very pleasant Imperial worlds. As a result, many of these worlds are strengthening their system defenses; the Imperial Navy is discussing plans for a new base at Untida/Adawi (1305 C-355585C).

Lishun/Masionia (1511 A-5858C8-D): The sector capital is governed by the Coalition for Peaceful Progress, which monitors all uses to which technology is put. Serious accidents in weaponry manufacturing plants provided the final push which brought the Coalition to power 75 years ago. The attitudes of the inhabitants do not noticeably influence the sector government.

Mashnamil/Shuna (0826 E-A9A479-5): Mashnamii houses a seagoing culture transplanted from nearby Shuama (0927 A-97A110-F). The 15,000 inhabitants live out their lives on sailing vessels, coalescing into seven small nation-fleets during the winter and separating again for the summer. Ships fly

the colors of their particular allegiance and sometimes prey on foreign boats. Vessels range from one-family craft to three-masted ships carrying up to 400 people.

Ironically, the parent culture on Shuama died out because of internal conflicts, and Shuama is now owned by Ling Standard Products. Shuama's oceans are mechanically farmed for fish oils and organic gems such as pearls and coral.

Sharasham/Vakuum (0805 A-441768-B): Sharasham have been under military rule from Norijo/Vakuum (0705 C-4426B7-B) ever since the Norijons helped drive off a Vargr invasion from Kfe-gou/Vakuum (0904 C-6987AA-7). The Sharashami are not convinced that the present arrangement is an improvement. Both worlds remain poor and traders usually pass them by.

Takaria/Criideu (3104 B-768200-C): The settlers here are refugees from Akitilon/Criideu (3101 C-666463-7), a client state that was taken over in 1023 by Zakishe/Criideu (3004 B-100453-B) in a bloody war that decimated the populations of both worlds. As of yet, the Zakishean invaders have not been able to track down all of the refugees in the forests of Takaria. Of course, the remaining populations of Zakishe and Akitilon, under technocratic rule, are not enough to field troops of sufficient number to capture the refugees.

Unfortunately, the only way that the Takarians will ensure their continued safety is if the technocratic government of Zakishe is overthrown. The Zakisheans covet the pleasant, liveable worlds so nearby, but their power depends on controlling access to technology and all but forbidding it to the conquered Akitilonians.

Vakada/Pryden (0112 B-100000-D): Vakada is a training planet for the Imperial Scout Service, where vacuum and low-gravity conditions are thoroughly learned. Supplies for the base in far orbit are brought from nearby Zemud/Pryden (0212 B-6868BC-7), which can also provide rest and relaxation for instructors assigned to bleak Vakada.

Computer Software for *High Guard*

By Dale L. Kemper and J. Andrew Keith

Three programs not listed in *High Guard* or *The Traveller Book* are often available to naval ships (and occasionally available to non-naval personnel as well):

Squadron Operations

This program allows several ships under unified command to function more effectively in combat. Use of the Squadron Ops program allows all ship captains of computer-linked vessels an increase of +1 to their ship tactics skill level. This program must run on all linked vessels simultaneously. One ship must run the "master" version of the program. If this ship is destroyed, another ship must take over the master functions. This changeover takes one turn; the squadron gets no benefit during this turn.

Large squadrons (those with more than ten vessels) always need a specially designed version of the squadron operations program. The special program is also needed for a squadron of any size, if some vessels in the squadron have lower tech capability.

Fleet Operations

This program makes large scale coordination of fleets possible by locating relative courses, positions, and projected actions on the tactical plotting screens of all ships in a given squadron or fleet. The fleet tactics skill level of the fleet commander is increased by +1 if this program is running. This program must run on all linked vessels simultaneously. One ship must run the "master" version of the program. If this flagship is destroyed, another ship must take over the flagship functions. This changeover takes one turn; the fleet gets no benefit during this turn.

Simulation

This program is used for training and planning purposes. The simulation program oversees the peripheral connections with the ship's computer, so other computer programs can be run without actually having an effect on the ship's operations.

Preplanned data is fed in to the program in such a way that ship instruments simulate any desired situation. Ship personnel can respond to the situation at their control stations; again, the simulation program handles these responses so that they appear to occur on instruments without the ship being affected.

Computer Software List

Space	MCR	Program Title and Effects	Skills
8	15	Squadron Ops; +1 Ship Tactics	Ship Tac-3
15	22	Master Squadron Ops	Ship Tac-4
12	18	Large or Mixed TL Squadron Ops	Ship Tac-3
12	20	Fleet Ops; +1 Fleet Tactics	Fleet Tac-4
20	30	Master Fleet Ops	Fleet Tac-5
5	.3	Simulation; allows simulation runs	Electronics-3

Characters With Class

THE GAMING DIGEST

by Gary L. Thomas

Bill was teaching John how to play **Traveller** one Saturday afternoon, and John was rolling up his first character, a Scout. John rolled a 9 for his social standing.

"Too bad," Bill said.

"Is that a bad roll?"

"No, it's not bad, it's just that you barely missed being a noble," Bill answered. "You see this chart here? If you had rolled an A, that's a ten, then you could have been a noble, and an eleven would have made you a knight. But a nine doesn't mean anything special."

A Neglected Characteristic

Strength, dexterity, and endurance directly affect combat. Education and intelligence are important because they set an upper limit on the number of skills that a character can have. But what about social standing?

Too many **Traveller** players and referees share Bill's attitude that social standing "doesn't mean anything special", but with a little thought, the use of social standing can add a lot to a **Traveller** game.

Nobles have their own rules, and this article will mention them only in passing. Adventure 9 of *The Travellers' Digest* will contain a complete set of rules for nobles, when the characters reach Capital. Alien races also have their own special circumstances, which will not be covered here. Note especially that human social standing and Vargr charisma are unrelated, and it would be unwise to apply these rules on social standing to Vargr.

Social Standing

The Traveller Book defines social standing as "the social class and level of society from which the character (and his or her family) comes". Under ordinary (non-noble) circumstances, the original value rolled when the character is generated represents the family's social standing on the character's home world. The possible values on this original roll are 2 to 12, but a character may have a social standing anywhere between 0 and 15.

The primary influence on family social standing is income and wealth, although occupation of the father and mother also has a bearing. We can apply "real-world" research to the game to group social standing values into six social classes, ranging from upper-upper to lower-lower. The descriptions in the sidebar are adapted from W. Lloyd Warner, Marchia Meeker, Kenneth Eels, *Social Class in America* (New York: Harper & Row, 1960), pp. 6-32.

Noble Ranks

Noble rolls must be handled in a different way. If the character starts with a non-noble social standing roll, but prior service increases this value to noble status, the referee should generate an event to establish the new character

class, and ignore the original roll. In the case of a knighthood (since this status is not hereditary), the referee should see that some Imperial dignitary knights the character for some outstanding action performed during prior service. (This is also the case when the player rolls an 11 for social standing and this value remains unchanged during prior service.) If the increase in social standing pushes the character into the ranks of higher nobility, the status may be likewise conferred by the referee for special service, or the referee can decree that the character has inherited the noble title from his parents.

If a player's original roll is noble, but prior service decreases this to a non-noble status (possible only for "other" characters), then the original roll represents the status of the parents, and the new value represents the status of the character, disgraced by his nefarious actions.

(If you use Supplement 4: *Citizens of the Imperium*, then any character with an original social class of A+ is a "Noble" character. This is the name of the character class, and does not mean that the character is noble. Rather, a Noble character is one "of the upper classes who perform little consistent function, but often have large amounts of ready money." Presumably, the Noble character is one who hobnobs with true nobles, and aspires to the nobility. When the player succeeds at the position roll, then and only then do the benefits of true nobility accrue to the character, conferring name and rank benefits corresponding to the social standing roll. Subsequent promotions increase the social standing, moving the character up the ladder into the ranks of the upper nobility.)

Social Classes in Traveller

These descriptions can not be exact, because they describe conditions that do not always exist in the context of the game. For example, many of these descriptions mention the average level of education of their members, but in **Traveller**, education and social standing are rolled independently, so the descriptions would not apply to every individual. These descriptions can be used, however, as a starting reference point so that a player can better understand the effects of the character's social standing.

Social standing rolls of 0 and 1 constitute the lower-lower class. Families in this social class have the lowest income. Many individuals are unemployed, and those that do have jobs work at tedious, menial tasks that are done by mindless robots at higher tech levels. Those in the lower-lower class have the least education of all the social classes, and they usually do not seek further education. Housing for the lower-lower class is substandard, and life is a day-to-day struggle to keep food on the table and clothes on one's back.

Social standing rolls of 2, 3, 4, and 5 constitute the upper-lower class, the largest social class of all. Conditions among the upper-lower class are much improved over the bleak existence of those in the lower-lower class, but life is still routine. These individuals are "blue-collar" and "working class" folks, with little education. These individuals for the most part are satisfied with their station in life, and they have little desire for more status in society. Families in the upper-lower class tend to have more children than those of other social classes.

Social standing rolls of 6 and 7 constitute the lower-middle class, the social class of the "average" Imperial citizen. Those in the lower-middle class fill the

Social Standing Away From Home

The character's social standing represents his social status on his homeworld, or in some cases, the status he had on his world of prior service. This status may or may not be the same when he travels from world to world around the Imperium.

In general, a character's status will be less when he is away from his home world. On "average" Imperial worlds, having normal tech levels and ordinary Vilani-Solomani Imperial cultural influences, this reduction will ordinarily be only 1 point of social standing. If a foreign culture is especially different, though, the character's status may change dramatically.

For example, a character may have no influence at all on a world ruled by a religious autocracy if he is not a practitioner of that religion. Similarly, a character from a high-tech world may have no social status among a primitive tribal society on a low-tech world, since the character would have no marital or family ties with the tribe. In a few cases, of course, the character with technological advantage may be accorded local status as a powerful magician or god, in which case his social standing on that world would increase dramatically.

Handling this variation means, of course, that the referee must generate the home world for each character. This is extra work, but it can pay off handsome dividends to both the realism and playability of the campaign. The details of a character's home world reveal not only the basis for his social standing but also

lower-level white-collar occupations, working in offices in nonmanagerial positions. Some members of the lower-middle class own their own small businesses, and a few serve in low-level positions in local or Imperial government. Although many of the lower-middle class do not have a college education, most of them desire that their children have the opportunity to attend college. Most in the lower-middle class desire to own their own home.

Social standing rolls of 8 constitute the upper-middle class, the first "successful" class. Its members own their own businesses, or they work as managers in other businesses. Many of this class are professionals, including doctors, lawyers, accountants, and upper-level bureaucrats. The upper-middle class is the best educated of all the social classes, with nearly all of its members having attended some college. Those in this class usually own their own home, often living in the suburbs of a larger city where they work.

Social standing rolls of 9 and 10 constitute the lower-upper and upper-upper classes of non-noble society, respectively. Members of the lower-upper class are the "nouveaux riches", having lately become wealthy, while those of the upper-upper class have inherited money that has been in the family for generations. Almost all of the members of these two social classes have attended college, many of them from prestigious private schools. Those in the upper-upper class often have considerable "clout" in local affairs, but they usually use this power in an inconspicuous way. Some may be established enough to have influence over Imperial affairs.

the tech level at which he was trained, his physical health, and his cultural predispositions.

Moving Up in the World

At this point we might notice what seems to be a problem with the **Traveller** rules. If social standing depends on wealth and occupation, why is it randomly determined in **Traveller**? Shouldn't the social standing characteristic value fluctuate as the character's actual status in society fluctuates? Both of these problems can be solved if we take a closer look at social class.

Social class does fluctuate in the original **Traveller** rules, but only during and as a result of prior service. Navy characters can increase their social standing as a result of a roll on the Personal Development Table. Navy, Marines, and Army characters with ranks of 5 or 6 can increase their social standing as a mustering out benefit. Navy captains and admirals receive a benefit of +1 Social as a rank and service skill. If *High Guard* is used, Navy characters can increase social standing as a Command Officer skill. In Book 6: *Scouts*, characters in the bureaucracy can increase social standing as the result of special or war missions, or as a result of higher rank. *Merchant Prince* characters can increase their social standing as a mustering out benefit if they had a high rank in a megacorporation. Supplement 4: *Citizens of the Imperium* increases the social standing of Noble characters as a position and promotion rank. Finally, "other" characters can lose social standing by their activities.

Keeping Up With the Joneses

An even simpler way to make social standing in **Traveller** more realistic is to look at it not as a function of income, but as a function of outgo. If a character earns Cr200,000 per year, it is likely that he is in one of the upper classes—but he won't be if he only spends Cr10,000 a year and hides the rest in his mattress.

A character at a higher social standing will tend to spend more, whether to uphold the standard of living he is accustomed to or just to indulge in "conspicuous consumption".

With this in mind, we introduce the following rule: a character in **Traveller** spends Cr250 times his social standing per month for food, lodging, and incidentals. This amount does not include special equipment or items not purchased on a regular basis by ordinary citizens. If your players already keep careful track of all of their "ordinary" expenditures, using this rule instead will eliminate a bookkeeping headache without reducing realism. If your players don't keep track of such expenditures, then this rule provides a simple way for you to keep your characters in need of cash—and therefore in need of adventure. Remember, hungry characters are active characters.

With this rule available, we also have a simple way to determine the change in social standing during the course of a game. If a character with social standing 9 only spends as much as a character with social standing 6, then the character effectively has a social standing 6. The character who refused to spend at the proper level would not have the advantages of high society, and the lower value would be used for UTP and reaction rolls.

Conversely, a character who spends as much as members of a higher class

will tend to be regarded as a member of that class—but only after a period of time. For purposes of the game, consider that a character who does not make high enough expenditures loses the appropriate number of social standing points immediately. A character who makes higher expenditures than necessary will rise in social standing at the rate of 1 point per game year.

With this method, characters will have a greater incentive to spend money. This is a great boon to referees: as a general rule, any excuse that characters have to spend produces a corresponding need to adventure to earn that money, whether it is by mercenary activity, interstellar trade, exploration, patron service, or other scenarios. If characters have a real, ongoing need for money, they will not become "fat and lazy" toward adventuring.

To be sure, there may be reasons why a character would not care about his social status—such people exist even in the real world, and a player may wish to roleplay one. In general, however, characters will be concerned about how they are regarded in society. It is the duty of the referee to insure that social standing effects are taken into account during the course of the game.

Throwing Your Weight Around

Social standing is also more important if it can be used to a character's advantage. This can happen in the course of everyday activities, such as getting a table in a nice restaurant or buying passage on a crowded starship. Social standing can also play a critical role at certain junctions in a game. Just to get you started, here are some UTPs for **Traveller** which use social standing as their primary characteristic:

To blackmail a Tukera shipping clerk on Vland to forge a receipt:

ROUTINE, admin, [soc]

REFEREE: The social standing for this UTP is the victim's characteristic, not the perpetrator's. Blackmail is easier against someone with a higher social standing. In addition, Vland is more status conscious than many worlds, and Tukera employees are also aware that their jobs depend on keeping in good social graces. This makes blackmail a ROUTINE task; under other circumstances on other worlds, it might be DIFFICULT or even FORMIDABLE. Time duration for this task varies.

To favorably impress a customs official on Deneb:

DIFFICULT, admin, soc, 1 min

REFEREE: If the character succeeds at this task, add +1D to the reaction table roll.

To gain an audience with the Baron of Lokita:

FORMIDABLE, liaison, soc, 1 week

When do you use education in a task instead of intelligence? Who would you rather challenge to a game of *Trivial Pursuit*: a character with high intelligence or one with a high education?

We'll discuss these and other questions next time. See you then.

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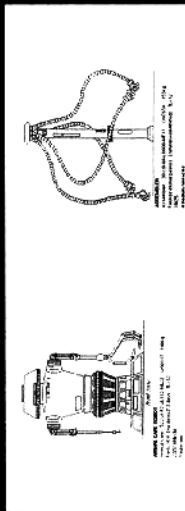
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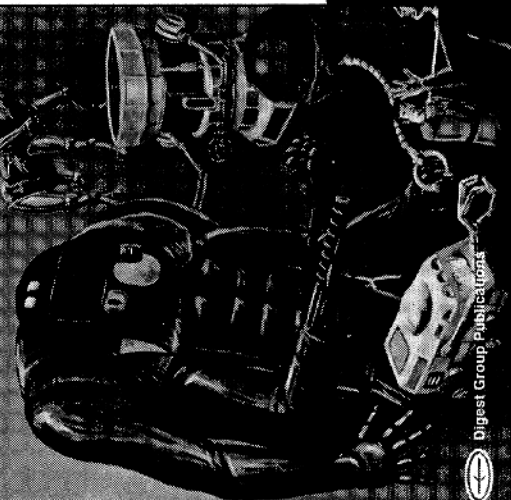
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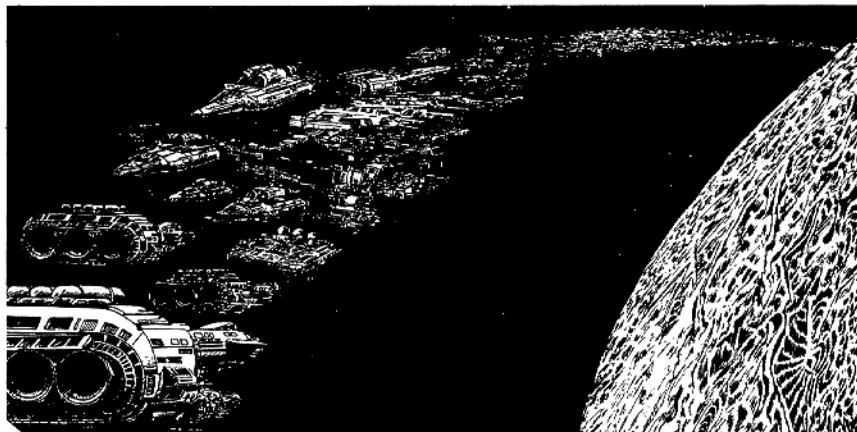
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Starships in Mothballs

TRAVELLER TECH BRIEFS

—by Joe D. Fugate Sr. and R. Liebman



Starships are expensive vehicles, and military starships are particularly so. If properly maintained, the typical starship can be expected to have a useful life of at least 80 years and often more. When a starship is not needed for a time, its owner may choose to carefully "preserve" it for reactivation at a later date. This preservation process is called "mothballing".

While non-military organizations infrequently mothball their starships, military organizations often mothball their starships as a routine part of the starships' later life cycles. This simply makes good economic sense: military starships are very expensive.

STARSHIP SYSTEMS

Mothballing a starship involves first understanding which component systems constitute the ship. Each system must be ranked according to importance: the most important systems must be the most carefully preserved.

Primary systems are absolutely vital to ship operation. A serious malfunction in a primary system can destroy a starship. Primary systems are so fundamental to the ship makeup that a backup system is generally impractical. The primary systems comprise the:

- Hull
- Jump Drive
- Maneuver Drive
- Power Plant
- Fuel System (fuel tanks and fuel delivery)

Secondary systems are vital to *proper* ship operation. A serious malfunction can make ship operation difficult or impossible. Secondary systems often have backups. The secondary systems comprise the:

- Computer
- Electronic Lines
- Environment System (life-support: air, heat, lights, grav)
- Flight Controls (helm, navigation, avionics)
- Fuel Processing (fuel scoops, fuel purification)
- Batteries (power plant ignition)
- Basic Sensors (EMS array)

Auxilliary systems are useful, but not vital to ship operation. A serious malfunction can be inconvenient, but does not impair or prevent ship operation. Auxilliary systems may or may not have backups. Auxilliary systems include the:

- Landing/Docking System
- Additional Sensors (neutrino, densitometer)
- Communications
- Weapons
- Screens
- Convenience Systems (doors, hatches, galley appliances, freshers, etc.)
- Transponder (ship identification transmitter)

PUTTING A STARSHIP IN MONTHBALLS

Deactivating a starship is easy if you don't have to worry about later reactivating the ship. Mothballing a starship involves more than just powering down the ship and leaving it to sit: trouble-free reactivation of the ship (at some undetermined future date) is the reason a ship is mothballed instead of scrapped.

Because of the need to insure that reactivation goes as smoothly as possible, mothballed ships require some occasional maintenance. Providing one or more caretakers for several mothballed starships fulfills this goal with the greatest efficiency. This explains why mothballed ships often appear in groups.

The typical mothballing procedure calls for the primary systems to be the most carefully preserved. Experts recommend the following procedures for mass mothballing of starships:

Place the ship in a vacuum—this insures the hull will see a minimum of weathering. Placing the ship in a parking orbit circling a small celestial body (such as a moon) often works the best.

Keep the power plant operating at its most minimum level—the fuel tank should contain only enough fuel to keep the power plant operating at this level for about two years. The two year period works well, since the exterior needs to be

checked for pits or breaches from space debris, and the interior needs to be checked to make sure that the power plant and computer systems are operating properly. Keeping the ship fuel supply to a minimum also deters opportunistic thieves.

The process used to preserve the maneuver drive varies, depending on the type of maneuver drive installed. Most maneuver drives of tech level 9 or greater are massive focused anti-gravity modules, which require no extra maintenance beyond a visual inspection when the hull inspection is done.

The jump drive must be protected if left to sit for an extended period. Most experts agree the jump drive should be partially dismantled, and encased in a xeroplasic cocoon applied especially to protect delicate, non-operational equipment. Since the jump drive doesn't function, this also insures that would-be starship thieves can't jump out of the system with their booty.

All secondary and auxiliary systems should be shut down or disconnected except for the ship's computer. Place the computer in minimal operation mode, requiring an access code (require a different code for each ship) for complete reactivation. Many experts also recommend that the anti-hijack program be left running, with a remote alarm signal to the caretaker's quarters. Some experts suggest that the transponder be left on—but opinions vary. As a rule, the Imperial Navy leaves the transponder on in their mothballed ships.

Depressurize most sections of the ship, and turn the internal grav plates and inertial compensators off. Turn off all lights. Finally, seal the entry with a computerized hull lock requiring an entry code (use a different code for each ship). The lock keeps a full record of all activity (both unauthorized access attempts and authorized accesses).

This mothballing process typically takes about 4 days per thousand tons of ship, assuming the normal complement of ship's engineers in the engineering section. This can be shortened to about 1.5 days per thousand tons if double the normal engineering complement is used. The mothballing process takes a minimum of 8 days in any case.

REACTIVATING A MOTHBALLED STARSHIP

To reactivate a starship in mothballs:

- Use a vacc suit, since the ship is unpressurized.
- Perform a routine hull/maneuver drive inspection.
- Unlock the hull lock using the proper access code. If the proper access code is used, the lock computer notifies the starship's anti-hijack program that the entry is authorized.
- Go to the bridge and enter the ship's computer reactivation code. This reactivates the full ship computer and terminates the anti-hijack program.
- Refuel the ship.
- Pressurize the ship.
- Install a reactivation crew (consisting mainly of engineers).

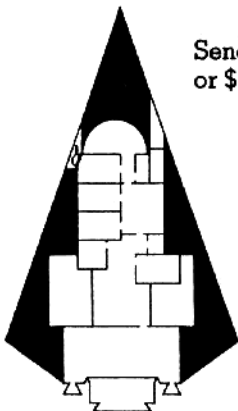
- Bring up the power plant to full; run full system diagnostics.
- Turn on all grav plates, inertial compensators, and lights.
- Remove the jump drive from its xeroplactic cocoon (easily performed by the application of a special gas); reassemble the dismantled portions of the jump drive. Run jump drive diagnostics.
- Reconnect all disconnected secondary and auxilliary systems. Run diagnostics on all systems.
- Install full crew.
- Run full diagnostics on all systems.
- Take the ship for a test run using maneuver drives. Exercise all systems (other than the jump drive).
- Take the ship into jump.
- Certify the ship as completely reactivated.

The full reactivation process generally takes about 6 days per thousand tons of ship using the normal compliment of ship's engineers in the engineering section. If twice the normal engineering compliment is used, this can be reduced to about 2 days per thousand tons. The full reactivation process takes a minimum of at least 12 days. A hasty partial reactivation can be done in less time, although such a reactivation is risky.

Editor's Note: Using this article, UTPs can be defined if the players wish to mothball or reactivate a starship.

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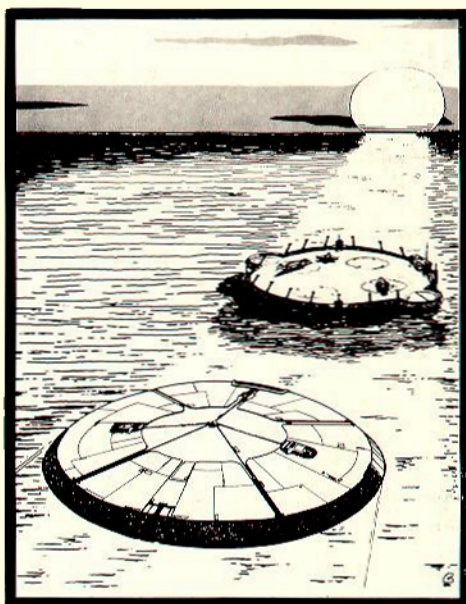
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