Forbidden Lore:
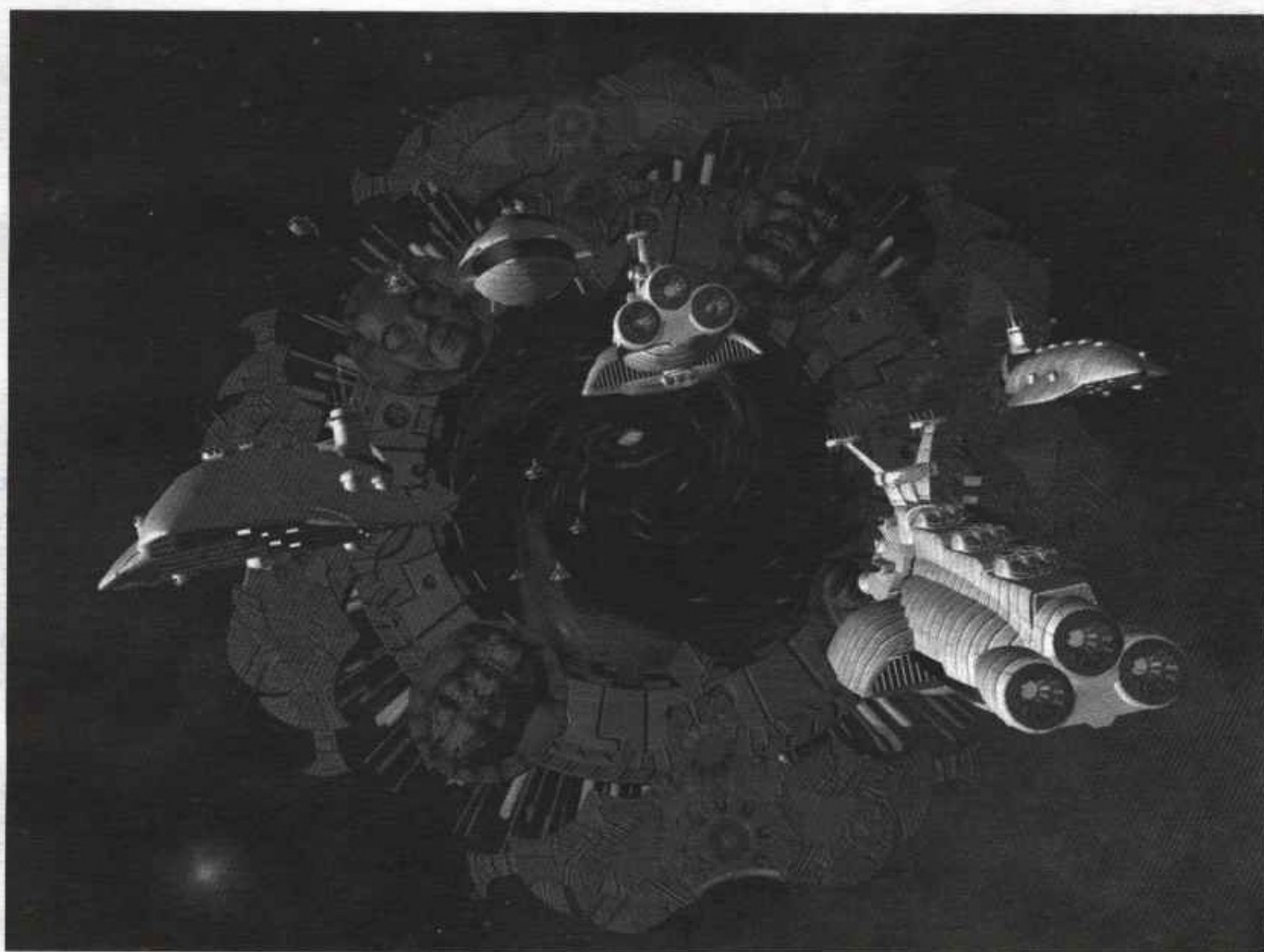# TECHNOLOGY

Forbidden Lore:
TECHNOLOGY

by
Bill Bridges, Brian Campbell, Andrew Greenberg,
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FADING SUNS

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Emblem:

The left-hand strip on the cover displays the emblem of the Preceptors sect of the Universal Church, detailed in the Appendix of this book.

Pilgrims:

Woe to he that goeth unprepared into the sorcerer's den, for marvels of destruction wait to waylay intruders into this diurnal realm lit only by the false light of caged heaven, crackling with thunder loud enough to burst the ears. Verily, beware the pleas of the sorcerer, even after he has suffered the rack and is rendered immobile with chains, for his tongue is sweet, full of marvels and wonders, promises of power unimaginable. Cut his tongue out lest such visions corrupt thee to worship his lore, and punish him with his own Works, so that the irony of his misspent labor is made clear to him.

Forbidden Lore: TECHNOLOGY

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BRIDGE

Prologue: Alustro's Journal

Journal Entry: October 31st, 4996 (Holy Terra calendar)

Since it always calms my nerves to compose in my journal, I undertake to do so now, for rarely has my need for calm been so great or my nerves so aflame. For so long have I heard the priests who tutored me condemn crime and the criminal, painting with words a picture of terror for he who commits such an error. Never did I think while a youth in the rectory that such a litany would be turned against me.

I am now faced with the moral quandary Julia Abrams mockingly warned me of when first we joined company in the entourage of Lady Erian Li Halan. "Wipe the mother's milk from your lip, priest," she had said, "If you travel with us, you're going to break all the rules."

I smiled then, used to such airs of superiority from working class freemen, who seemed convinced that only they knew the ways of the worlds and that only their feet were not weary from walking them. "Let not thy vows to Mother Church be forsaken, and all resistance will yield to thee," I quoted, so confident, even though the Avestites were then on our heels. But I knew that their hunt was only political. At least, it was then. I fear our actions have made it otherwise. I have broken my vows to Mother Church and touched the sleek and cold brilliance of technology, risking my soul in the act, and the souls of others in my care.

My sojourn into sin began when Earl Sebastian Hazat de Aragon made loan to Lady Erian of a starship in his family's care. He did so in return for my liege's later favor in an as yet undisclosed matter. The vexing charity of the nobility is best left unaccepted, but we were in dire need of transport to Kurga, for on that embattled world was rumored to be a long-buried secret vital to House Li Halan. Possession of this secret could very well restore land to Lady Erian.

We took possession of the craft with Julia Abrams as pilot. Even though we had traveled far already in her company and had become fast friends, sharing life and death struggles together, she proved her guild ties once we were in the craft. A loud argument ensued when she raised the matter of compensation for her piloting the craft. She dared to ask her boon companions — nay, the Lady who succored her — for money. The guilds bathe in such filth, preferring the clink of coin to life-giving water. The matter was finally resolved when all of us threatened in return to charge her for our once-freely given aid in future matters. She relented and consented to pilot the craft in return for a share of any profit our group's endeavors might one day yield.

I shall perhaps later add an entry concerning our journey though the vast spaces between Aragon and her jumpgate, and the void which awaited us on the other side of that gate. But I am eager to address the matter of which I now write — of technology and its misuse in the eyes of the Church, and the rabid hate invoked in those whose mission it is to guard the faithful from such sin. My sin.

We landed on Kurga undetected, for the Hazat and the Kurgan rebels were fully engaged in bitter warfare at the gates of the capitol, a battle which, as with many others in that location before, would come to naught but death for many soldiers with victory for none. The capitol stood firm.

Far from it, in the deep forests to the north, we landed our craft near the spot to which our data had led us. From a long-slumbering think machine on Aylon I had retrieved a map of this very place, detailing from a millennia ago the city which once thrived here, but was now swallowed by root and loam, canopied by leaf and vine.

Such wilderness expeditions were not unknown to us, and our Vorox companion, Onganggorak, led us through the winding paths to the remains of a structure wherein rested our secret find. After digging a while to gain egress, we traveled by fusion torch light through corridors untouched for generations. After nearly a day of such travel, with many false turns and dead-end alleys, we finally came to the vast vault.

I gasped in astonishment at what lay before us. I had

seen weapons of war before, but rarely so grand as these. They stood in perfect ranks, unblemished by the centuries, perfect metal cannons of destruction such as have never been seen by the faithful souls of our modernday Empire. Such Second Republic monsters could only have been crafted by godless men, who knew not compunction or remorse for the horrors their metal children wrought.

It was our mission to retrieve one of these beasts, of the same design and type clearly once used by the Li Halan long ago when they had secured their fiefs from the sinful Republicans. But as I looked upon them now, I shuddered, and remembered the legends of the early Li Halan, how they had made pacts with demons and slaughtered their enemies with such ferocity as to make the Pancreator weep. I knew doubt then. Could I aid even my sworn liege in this task? To return to the Known Worlds with such weaponry? Surely, to hand over this technology would return Erian to the graces of her family — but to what use would it then be put? These things could only deliver horror and soul-death. Oh, the Emperor Wars had been one long night of terror for too many, with similar rediscovered weaponry shifting the balance of power for each house who discovered them. What if these weapons convinced the Li Halan that they could defy the power of the new Emperor?

I pleaded with Erian to realize what we had done, and to leave these things untouched, to destroy the data which had brought us here. But she was flush with the power of these things, and heeded me not.

Even with the burns that now pain my arm, I thank the Pancreator for the delivery of his punishment then.

We were fools to think that the Avestites had not followed us here. Ong had said too much in public under the influence of drink, and word had spread of our goal. They burst into the room brandishing flameguns and screaming their litany of seizure.

Of course, we all resisted. We hid behind the monstrous carcasses of the cannons and fired our weapons while they fired theirs. But it was a short fight, for Erian was struck when her shield burned out. We pleaded surrender, knowing that because Erian was noble, they would have to return her for trial rather than let her die here. There was always the hope of escape then.

While I ministered to her wound under their watchful gaze, they demanded that Julia show them the workings of the cannons. She refused at first, but their brands convinced her flesh, and her resolve soon followed.

Let what bad words I said of the guildsmembers earlier be mitigated by my thankful admiration for their cleverness — as dangerous as it is. They are all trained in the art of talking, used to befuddle their customers so that they might sell faulty merchandise for good price before the dupe is aware of what he has bought. Such a gift served Julia here, as she maneuvered the Avestites to inspect the mouth of the cannon as she pressed the remote control

unit she had pocketed during the firefight.

The ensuing chaos allowed us to escape down a side tunnel, which Ong collapsed behind us to stifle pursuit. I followed in a daze, ashamed at my extreme relief. Like a child who had avoided punishment, I was elated — but great Pancreator, others suffered in my stead.

I can never forget the sight of the Avestites blown apart by the fires belched forth from the metal beast, asleep for so many years, awakened now at an instant to destroy all in its path — including its own brethren, standing in ranks before it. The fellow cannons' screams pained the ears. They did not go gentle to their doom, for the fires in their innards erupted outward, released from their long captivity by ruptured steel.

It was only the fire-retardant robes of the Avestite which stood before me that prevented my burning in the blight. He burned for me. My clothes were alit and my skin hot, but I was alive. Ong's fur was singed terribly, as was Erian's clothing, but our fear helped us ignore the pain as we bolted from that fiery chamber.

We suffered two days without food or water in the winding caverns before finding escape from that tomb. Our craft was still where we had left it, although the Avestites had tried to search it. Of them, there was no sign. Did any survive the conflagration? I pray for their sakes and ours that the answer is no.

I have received a harsh lesson, and one which I will endeavor to heed. But not so my companions. Erian has resolved to not give up her search for similar engines of her family's past. Julia is positively ecstatic about the power she wielded with but the movement of her thumb on a switch. Cardanzo, Erian's bodyguard, has sworn to be more cautious around such technology, but has developed no fear of it. Only Onganggorak has realized the full import of what we have seen. Bred among little technology, on a world where only one's own strength can prevail over others, he rightly fears what destruction can be wielded with such machines.

I have thought deeply on this but have no easy answers. It was such technology that aided Alexius in his ascent, and I am not one to deny the greater good he now delivers to us. Indeed, I write this from inside a cocoon of metal speeding through the void towards a machine greater than any yet conceived, the jumpgate of the Annunaki. The Prophet admired such space quests, yet abjured the cannons we have seen. He knew the terrible, seductive temptation to use them.

I am only a young priest, but I know that technology is a greater force than I, awakening desires within me and others to remake the worlds in images not of my choosing.

Brother Guiseppe Alustro

Introduction

Freedom and Oppression

Every science fiction story or game deals in some way with *things* — the tools, weapons, and starcraft that aid humanity's quest through the stars. These items change the way humans deal with the world — and with each other. Each new advancement in technology has its effect on society and culture, sometimes to the detriment of old and cherished values, but usually to the betterment of material existence for a wider variety of people. However, technology can also introduce new horrors once barely imaginable. While most myths have stories of the destruction of the world through fire, few modern men could conceive of such fables as reality until the atomic bomb was introduced.

The Second Republic was a time of unprecedented advancement in technology at an unprecedented rate — a rate which often overstepped humans' ability to keep up, leaving some battered in the chaotic wake of progress while others soared to new heights of novelty. Previously when technology threatened to change the livelihoods of humans in such a way a revolution was born: the Luddites. These 19th century English folk didn't just see their lives changing, they saw what little power they had over their lives — their personal skills— made useless in the face of the coming of machines. As they were impoverished by the Industrial Revolution and factory owners grew rich, they fought back. Sabotage. War against the machine.

Luddites are much maligned in the 20th century age of cyber-technofetishism, becoming a symbol of provincial stick-in-the-muds afraid of change. But few revolutions caught on as well as theirs did. If they had not touched an already raw nerve, it is doubtful that the King of England would have needed to draw his army back from France to deal with them. How the times change. At the turn of the Renaissance, it was the scientists who revolted against a stifling rule of superstition and tradition.

But in the 19th century, the people revolted against the fruits of a science which threatened their prosperity.

Today, we see the failure of their revolution as a foregone conclusion. But are all such revolts against technology doomed to such failure? Is the march of progress inevitable? Not necessarily. Just as technology can rise, history has shown that it can also fall. Amazing innovations were made during the Roman Empire which did not catch on for a number of reasons, one of which was that the overall social structure was not prepared to accept them — who needs steam power when you've got slaves? The fall of the empire and the resultant loss of wide-spread education is well-known to all schoolchildren. Not until the Renaissance was innovation again accepted society-wide.

In **Fading Suns,** technology has taken a catastrophic fall. The revolt began during the Second Republic when technological evolution outpaced humanity's ability to effectively integrate it into their lives without widespread harm to societal institutions. It was aided by the greed of a few lusting after the riches of the many. Education among the masses is detrimental to the survival of the totalitarian state. Thus, education is the first thing to go, ousted by the new rulers, replaced with brainwashing. Widespread travel must also go, for the ability to see how the "other half" lives ignites resentment through the realization of what one lacks. Thus, no one must even realize they lack anything — anything they deserve, that is. Serfs are taught that they don't deserve what their masters have, and most of them believe it.

When the Church, caretaker of humanity's soul, joins in such a conspiracy, the ward against innovation is complete. While the Church may have begun its crusade with the same intent as the Luddites — to protect the livelihoods of simple folk — with their help, the pendulum of oppression swung the other way, from a damaging technology to a damaging lack of it.

This book examines the present situation of the

Known Worlds and gives some idea of how things got the way they are. Many of the high technology tools provided here are legendary to the average peasant; while he may see an Imperial Lekaf fly overhead, he can only dream of riding in one. Such a disparity is not so obvious to the average freeman, capable of taking his destiny into his own hands, but the demarcations of power are nonetheless clearly obvious: technology is in the grip of a few powerful people who are slowly strangling the Known Worlds in their attempt to maintain that grip.

The threat of superior technology wielded by outsiders, such as the Vau or the Symbiots, seems to have spurred some concessions from the Church toward new technology, but such reforms are invariably military innovations or rediscoveries of past war craft. Those innovations which might free the peasants from their fields are considered criminal by the noble houses. It is the same for luxury goods or time-saving devices. Serfs with free time on their hands are serfs with time to think about sin.

Innovation

One book could not possibly provide examples of every piece of technology and equipment in the Known Worlds — the range is simply too vast, from medieval bows to starship-mounted meson cannons. A certain amount of innovation is required on the part of the **Fading Suns** gamemaster and players. This book is full of ready-to-play examples, but they should also provide starting points for the creation of new items by gamemasters and players. Future **Fading Suns** supplements will continue to give new examples of equipment which can be used by gamers as guidelines when creating their own items.

WARNING!

Symbiot Infestation
Beware
Contamination Death

Symbiot Infestation
Beware
Contamination== Death

Report any and all strange objects and persons

Do Not Approach--Contagious

By Order Of The Emperore

What's In This Book

Prologue: A chapter from Brother Alustro's diary concerning a run-in with the Inquisition.

Introduction: A few words about this book and what's in it.

Chapter One: Theory and Practice: Some notes on the scope and background of technology in the Known Worlds, and details on economics at the close of the fifth millennium.

Chapter Two: Tools: Details on the technology and crafts of the majority of Known Worlders (peasants), the massive array of warfare machinery, and rules for vehicle encounters.

Chapter Three: Man and Machine: Cybernetics, think machines and golems — just the things to get someone into deep trouble with the Inquisition.

Chapter Four: Spaceships: Details on some of the more common ships of the Empire and rules for engagements between them.

Chapter Five: Weird Tech: Psychic equipment, Church relics, Vau technology and Symbiot things — all proscribed and all misunderstood.

Chapter Six: Church Law: An introduction to the Church philosophy concerning science and technology, and the punishments for those who break the laws of proscription.

Appendix: Preceptors: A new Church character role for **Fading Suns:** the sect of scientists and teachers bent on recivilizing the Known Worlds.

Chapter One: Theory and Practice

After the Fall

Many believe that the close of the fifth millennium is a post-utopian age. The people of this dark age erect myths and legends from the little-remembered history of the Second Republic, secretly casting a golden glow into the past, seeking an ancestral paradise to which they can anchor their sinking dreams. The search for a past golden age seems to be instinctual in humans; the quest has moved men throughout the centuries. But so too has the forward-searching urge to build a paradise of the future, a golden tomorrow when all our problems will be solved through the wondrous discoveries of science, scientists ever-peering into a limitless universe for solutions to our dilemmas. Taken to extremes, both visions seem slightly neurotic. Yet these visions can drive us to great deeds or console our catastrophic failures. Both visions play a strong part in **Fading Suns**, although most Known Worlders look to the past for condolence rather than instruction, and view the future with fear rather than expectation.

During the Second Republic, humanity built a society of humanitarian virtues and expansive progress. Technology rose to heights previously imagined only in science fiction stories. The wildest theories became common practice. It seemed that nothing was beyond the reach of the human mind and the grasping hand which followed it.

But the deeper scientists looked into the universe, the more arcane it became. With every veil pierced by observation, new, more opaque veils were perceived beyond. One answer led to a million questions, but that answer also invariably led to a greater material benefit — a new fusion power system, a new tissue regenerative serum, or a new building material as hard as steel but as light as air. Unlike the pompous wags of the early 20th century, who with each new discovery declared that all that could be known was, the scientists of the Second Republic realized that the universe was a neverending font of new mysteries.

Or perhaps they saw enigmas where there were none. Some believed then (and some still believe) that the scientists' constant search outward was a search within, that their new discoveries really said more about their own psychological complexes than it did about the universe. That they were all projecting onto the unknown what they wanted to see. That there could not possibly be so complex a universe as the millions of bizarre theories professed.

Toward the end of the Second Republic there were as many valid, provable theories about the workings of the universe as there were automobile models in the late 20th century. The problem came down to proofs and the standards for acceptance. Anything which produced a leap forward in material goods — the first molding of ceramsteel, the discovery of antigrav plates — required a theory to explain it, and whoever could put forth the most aesthetic theory got the grant and acceptance. But it seemed that every new discovery created a whole new field of science, rather than a new endeavor in an already established branch. Science became specialized rather than holistic and integrative.

Critics, especially those in the Church, declared that scientists and the citizens who believed them were in the grip of illusion. They claimed that a demon's greatest power was to enthrall humans with mystery, to create a million carrots to lead people deeper and deeper into a world of intense imagery and hallucinatory "facts." A world so complex that no one could possibly understand it, so people would refuse to accept any explanation as true — all were true, none false. The universe would then be seen as a logic puzzle without end.

The Church declared that the universe, full of the Pancreator's mystery, could be apprehended and understood only through the grace of the heart, not the logical mind. By accepting the love of the Pancreator for his creation, the created being's heart opened up to new perceptions strong enough to see through illusion to the oneness at the heart of everything. Like the Buddhist belief

in Maya and the world of illusion or the Gnostic belief of the world as a lie, true reality lies behind the veil of complexity, obscured by the shadows of *things*, and is actually One, a unity apprehended only through holistic, mystical perception — or through the religious life, as practiced by the Church. In later years, especially after the Fall, as political power became an important goal for the Church, the emphasis on mystic vision was downplayed, and the importance of dogma was stressed.

The Second Republic was a battleground of competing paradigms, all of which toppled when the nobles marched in, with the Church following closely behind.

Rediscovering the Past

Most Known Worlders are somewhat fearful of the things of the past. They have been taught by the Church and their elders to beware the works of their sinful ancestors. The high-tech remnants of the Second Republic are hubris incarnate and should be avoided by all who fear for their souls. This keeps the superstitious peasant from getting his hand on things the nobles, guilds and even Church priests fight over — the high-tech devices of bygone ages.

The upper classes are desperate for high-tech artifacts and relics, but they especially hunger for the scientific knowledge that would allow them to replicate these items. The most sought-after items are, of course, tools of war. The Emperor Wars witnessed a frenzied search by all par-

ties for high-tech, and many secret laboratories sprang up to manufacture proscribed tools once forbidden by the Church. The Church did not have nearly the amount of power or money as the nobles did in these endeavors, so they used the threat of Inquisition to ensure that nobody got too far ahead of them. The Merchant League sold their services to the highest bidder, using the profits to search for secret technologies in the hope that these items would allow them to declare a Third Republic and rule the Known Worlds.

Due to these labs and experiments, the present years under Emperor Alexius's rule have seen more high-tech innovations than the past 500 years combined. Sciences once forbidden but now practiced to benefit their noble patrons are again threatening to change the face of the Known Worlds. Nothing has done more to further promote this new growth than the current peace. Either too exhausted or too poor to continue fighting, the noble houses now put many of their resources towards new technological discoveries in the hopes of gaining a peacetime advantage over their rivals.

New laboratories, however, are not the keys to immediate knowledge. Instead, adventurers are hired to scour the Known Worlds for artifacts. Scavenging the past is the quickest and surest way to gain tech. Hotshot pilots and mercenaries are sent forth in search of such magical items as the legendary "Aarontech Inc. Fusion Caster 13X" or the "Braumhoffer Industries Multiphase Field Converter."

Once (if) these items are recovered, then master Engineers are hired to dissect their secrets and replicate their machinery.

But as surely as old tech can be rediscovered, it can be lost again. The Inquisition does not appreciate this new urge for science. Not only does it corrupt the souls of those who handle it, but it threatens the balance of power between the Church and their rivals. Most assuredly, they say, the horrors of plague bombs, Xaos gas, planetary bombardment from space and other atrocities used during the Emperor Wars cannot be explained away as the excesses of a few deranged generals. The technology itself begs to be used, and if its use can only cause horror, then the user is responsible for that horror.

Thus, researching old tech or tracking down artifacts can be dangerous. Not only because it may involve tramping through jungles full of genetically engineered beasts set free long ago and since evolved into even worse forms, but because the Inquisition may not want the fruits of such labor to be placed in the hands of the relic hunters' patrons or released into society.

The Mysteries of the Universe

While the rediscovery old scientific paradigms may rend the veils of superstition surrounding a lot of technology, the same problem confronted by the Second Republic scientists arises: technology tells us a lot about *how*, but very little about *why*. Just a glancing perusal of Vau technology is enough to convince even the most brilliant Engineer that she knows very little indeed about the laws of nature.

Even though the Second Republic built many great things, the mysteries of the universe still lie unanswered. The phenomenon of the fading suns still threatens the lives of everyone, human and alien alike. These epic dilemmas can only be investigated by the bold, and only the most steadfast can hope to solve them.

The Scope of Known Worlds Technology

It is difficult to sum up the sheer range of technology in the Known Worlds. Just about anything imaginable could have existed at some time during the Second Republic, whether as widely manufactured consumer goods or as a unique experiment by a crackpot in his basement.

When humans encountered alien technology, they couldn't help but be influenced by some of the alien paradigms. The technologies of the Ur-Ukar led later Second Republic scientists to great advances in metallurgy, while the science of their Ur-Obun cousins lead to amazing breakthroughs in understanding quantum anomalies and other subatomic and theoretical problems. The Vau, too, greatly influenced human technologies, although the leaps they provided came from technology stolen from

them by ambitious and bold explorers. At times, the Vau seem not to care about such theft, but at other times they pursue the theft of certain items deep into human space, slaughtering the thieves and destroying the purloined goods before other humans can get a good look at them.

Perhaps the most dangerous innovations are promised by the study of Symbiot tech. A wealth of biomolecular knowledge lures scientists to Stigmata to capture specimens. But controlling such observation and experiments has proved nearly impossible — the hapless scientist is invariably possessed by his specimen and either runs amok among his fellow scientists or disappears into the Stigmatan jungles to join his new brethren. Nonetheless, a few items have been created from Symbiot observation, including the dreaded Xyll Warbeast (see Chapter Two: Tools).

Imagination in Balance

When creating Second Republic artifacts or the relics left behind by the Annunaki, the gamemaster should feel free to use her imagination, unhindered by 20th century scientific paradigms. Such high-tech should have more the feel of magic than science. Those few characters who may understand the scientific principles involved may ask for an explanation, but there are no easy answers. Such tech utilizes paradigms entirely divergent from our limited 20th century understanding of such things like quantum mechanics, biochemistry and cosmology. (For instance, the dark matter quandary: no guilty particle has been found yet. If indeed 95% of the universe is made up of this invisible substance, as is theorized, then some vast revisions concerning reality are on the way.)

It may help when using extreme high tech to imagine a fantasy game paradigm. When the heroes return with the magic grail to heal the king, it is a wonderful, legendary experience. However, as in the fantasy game, the grail is not replicable. All the court wizards (Engineers) may peer endlessly at the grail to dissect its secrets, but without understanding the very principles which make it work, making more of them remains impossible.

Which leads to the topic of balance. The sociopolitical structure of the Known Worlds is in a period of transition after over 30 years of war. As the victors settle into their places and the losers struggle to remain afloat, everyone is searching for new ways to gain the upper hand. The ancient technology buried in ruins on many worlds could be the keys to the new kingdom. Anytime one of the power factions gains a piece of tech the others lack, they gain a certain power over their rivals (or an immunity from their rivals' prosecution, in the case of the guilds).

The gamemaster needs to be very careful when introducing high-tech into such an atmosphere. Player characters who discover a device like the "Death Star" could become the Emperor's greatest enemies or friends overnight. However, it is not recommended that such events

occur often — if at all.

Mysteries that can greatly change the balance of power do exist out there — the Vau, the Symbiots, the Lost Worlds of the Second Republic. Using these mysteries judiciously is part of running a **Fading Suns** game. As with any continuing story or epic, major events should play themselves out in stages, giving enough time for the true gravity of a discovery or threat to set in before the next stage explodes onto the scene.

Interface and Coding

As explained in the rulebook, interface is the act of using technology while coding is the act of creating it.

Interfacing is largely determined by the "user-friendliness" of the technology, although the user's understanding of the technology has a lot to do with it. Some things are almost instinctual: every human can figure out just by looking at a sword that it is designed to be swung (or thrust) at a foe. But many people have no clue how to use a computer mouse; they have to be taught how to use it or be given time to play around with it for a while. In either case, learning or self-teaching, how well someone understands the use of the technology depends on how well he or she can grasp the overall pattern involved — the paradigm or gestalt of that technology.

Some people understand computers as if they were born to them, while others will never get them. Likewise, some people understand artillery such as catapults or mortars, while others just can't hit the broadside of a barn with one even with a detailed manual (the reading of which often requires other lores, such as mathematics). This understanding, the ability to interface with varying types of technology, is represented in **Fading Suns** by the Tech trait. In the 20th century, such a trait is so widespread that its lack is barely noticed. But in the dark ages of the fading suns, its lack is the standard. Most folks only understand medieval or at best Victorian-style mechanical or chemical technology. The mysteries of electricity, with such dualities as "positive" and "negative" and the hierarchies of "amp", "volt" and "ohm" are beyond them. Even farther out of reach are subatomic or force field physics.

Coding is a much more difficult task than interfacing. Inventing new technology is a feat. Even in the Middle Ages, among peasant villages, good coders were considered important people: blacksmiths, wainwrights, etc.. It is sometimes easy to forget how fortunate a skilled craftsman was back then; his skill ensured a livelihood above that of a field worker. Apprenticeship to the higher crafts was not easily awarded, and once given, was rarely spurned. A man with a trade was a man with something he could call his own. It made him useful, and use was importance then.

Coding (creating) new technology — not just a better toaster, but a new device entirely — requires a certain transcendent genius. Such leaps don't always come through rigorous, logical thought. Indeed, they most often appear in dreams or visions, after the rational mind has become exhausted from fighting the possibilities. Only when it yields to the unconscious does brilliance or inspiration shine through, providing that one link needed to complete the chain. Of course, it takes a sharp mind to utilize the breakthrough.

In **Fading Suns**, a character's Tech score must be two levels higher than the Tech Level of his desired invention before he can make (discover) it. Thus, only those highly trained in high-tech paradigms could invent the highly complex technology of the Second Republic at its pinnacle (Tech Level 8, requiring a personal Tech score of 10). It is conceivable that some people may be able to raise their Tech scores above 10 (some Vau seem to have done this), but such figures have yet to be seen.

Economics

There are few subjects in the Known Worlds as confusing to most people as is economics. Very few can stand far enough back to understand the big picture. An interstellar eye is called for, and such a vantage point can only be held by those in the five major houses, the Merchant League, the Church, or the Emperor. And all these factions disagree on key economic principles.

Certainly the Emperor is on the top of the economic food chain. He controls the unit of commerce — the firebird— enforcing its use and ensuring that only the Imperial Mint can turn out genuine firebirds. The penalties for counterfeiting are steep, ranging from long-term incarceration for minor offenses to execution for major scams.

Next in the chain are the nobles houses. The individual fortunes of the houses rise and fall, but the five major houses collectively control most of the wealth in the Known Worlds. The Hawkwoods are getting richer and richer while the Hazat see their coffers dwindling in their war against the Kurga Caliphate. They are beginning to rely increasingly on plunder from that barbarian empire to make up for their losses.

Most nobles' fortunes come from the simple fact that they own almost everything — the land and the people of the Known Worlds. The profits from the labors of most peasants — crops, handicrafts, industrial goods, etc. — all goes into the hands of the few lords who rule over them. Very little wealth is returned to the peasants; usually only enough to keep them alive and relatively docile, although often only the barest of living circumstances is afforded them. The nobles' wealth is spent on a variety of things, from the upkeep of their estates to the training of house armies and navies, among other things. Money is also distributed to the guilds in the form of contracts for various goods — the building of palaces, the manufacture of war machines, legal experts to aid in suits against other rivals, and many other services besides. A large chunk of noble money also goes to Church tithes. Such tithes are often coerced through threat of excommunication, but are

more often given by lords who are genuine believers in the Church and its commandments.

The Church and the Merchant League have about the same amount of total holdings (the League has more tech and resources, but the Church owns more land). However, most Church wealth is in the hands of the Orthodoxy, with little among the other sects. The Merchant League's wealth is spread relatively equally between the major guilds, but each guild experiences boom and bust periods.

Among the lowest in the chain are the yeomen, those freemen with no strong or direct ties to a house, sect or guild. These usually make up the membership ranks of small, local guilds, including crafters, minor money lenders or any variety of crafts too insigificant or onerous for a person of higher class to take on.

The last link in the chain are the serfs, the peasants who do not even own their own freedom. They are born in thrall to a noble house and usually spend their entire lives on the fief in which they were born. The majority of Known Worlders are of this miserable class, too uneducated to even realize just how low they are. If most serfs were told about the egalitarian rights which were afforded to all Second Republic citizens, they would refuse to believe such a world ever existed. Li Halan serfs even believe that they were placed into their caste by the Pancreator and have no choice but to live out the poor role given to them in this life.

Firebird Prices

Presented here are some guidelines for determining the firebird costs for a variety of items. The quantity of different items, worlds and conditions prevents a comprehensive list of prices for each planet. Instead, take the following conditions into account when characters attempt to purchase an item on one of the Known Worlds:

Price Variation	Condition
-10 – -20%	Supply exceeds demand (wine on Aylon, high-tech on Leagueheim)
-30 – -50%	Supply greatly exceeds demand (slaves on Pandemonium)
+10 – +30%	Demand exceeds supply (penicillin on Severus, food on Leagueheim)
+50 – +100%	Demand greatly exceeds supply (passage off Pandemonium, luxury goods on Stigmata)
+30%	Select manufacture: only one source makes the item (jumpkeys from the Charioteers)
+10 – +20%	Select outlet: only one place sells it on that planet (books on Kish)
+30 – +50%	Locally proscribed (books on Pyre)
+100%	Universally proscribed (Vau tech)

Quality

Not all items are created equal; some are more shoddy than others. An item's Quality gives an indication of superior, average, or poor workmanship. Quality usually ap-

plies only to a particular item, not necessarily to a class of items, but some things may share the same quality (a machine-engineered batch of pistols with the same trigger flaw or every bow carved by Squire Daniel of Midian).

In addition to the modifiers given in the rulebook (Chapter Seven), Quality also affects the price of a given item:

Quality	Manufacture	Price Adjustment
+3	Premium	+30%
+2	Masterful	+20%
+1	Superior	+10%
0	Standard	base price
-1	Poor	-10%
-2	Unreliable	-20%
-3	Disrepair	-30%

Income

With power comes wealth. Below are the average yearly incomes for residents of the Known Worlds. They represent a variety of salaries: stipends for noble house members, average contract payments for guildmembers and allowances for Church priests. The classes listed below are suggestions only; local conditions or personal tragedies can radically change income. A low ranking minor guildmember on Leagueheim may make much more than a similar fellow on Cadavus, and not all barons are equally wealthy; some build great debts or rule fiefs that have suf-

fered war or natural disasters, cutting down the income gleaned from them.

Firebirds/year	Class
1	Serf
5-100	Yeoman
100	Low rank (3 pts – 7 pts) minor guild
300	High rank (9 pts – 11 pts) minor guild
200	Low rank (3 pts – 5 pts) major guild
700	High rank (7 pts – 9 pts) major guild
100	Low rank (3 pts – 5 pts) priest *
400	High rank (7 pts – 9 pts) priest *
1000	Knight, Bishop (Good Riches)
3000	Baronet, Consul (Well-off Riches)
5000	Baron, Archbishop (Wealthy Riches)
10,000	Earl/Marquis, Count, Dean (Rich)
20,000	Duke (Filthy Rich)

* Church income adjusted by sect as follows: Amaltheans (-10%), Eskatonic Order (-20%), Avestites (-30%), Preceptors (-15%, no expense account but no limit to personal riches)

Sources of Income

There are many ways in which characters can gain income beyond their salaries. Below are some of the possible sources:

Lands

Land is a valuable resource on many planets. The quality or location of the land is of prime importance; a

backwater acre on Malignatius could be worthless, while the same acreage on mineral-rich Shaprut could be priceless. A tiny lot on urbanized Leagueheim, where real estate is scarce, may be worth more than a resort island chain on Tethys. The resources of the land are also important. Are there gold or silver deposits? Veins of fine marble? A native substance not replicable elsewhere (such as Ravennan marble)?

What someone does with his land determines the wealth gained from it. Long-term mining will yield years of riches, but will eventually dry out (although this may be a problem for grandchildren to deal with). Renting the land to others (farmers, merchants, etc.) will bring less money, but it usually proves steady.

Taxes: These are collected from those living on or using the lands, both peasants and freemen renters. This is the main source of income for most noble houses, gained from their many fiefs throughout the Known Worlds. Not only can rent be charged, but passage tolls, trade fees, and usage taxes can be enacted, gleaning money from the residents and travelers on the land.

The downside to taxes is that someone has to collect them. This onerous task is usually meted out to the more thuggish members of a noble's retinue, for the brutish seem best at keeping the taxed masses in line (especially when tax rates are increased).

Tariffs: These are collected by nobles from foreign merchants wishing to trade in their fiefs or manufacturers wising to sell their goods to merchants in those fiefs. These merchants must pay a percentage of their trade to the house.

Manufacturing

This could be food, crafts, industrial goods, or any number of different things. Whoever owns the factory or system which produces these items controls its trade. Such items are usually sold in bulk to merchants who are better capable of selling it to consumers, but owning the means of distribution brings in extra money. However, there is always someone trying to muscle in on the territory or build a better widget. Competition can take a big bite out of profits unless it is controlled. For this reason, noble houses dependent on manufactured goods often perform hostile takeovers of their rival's factories with military forces.

Patents: A patent is equivalent to owning the means of producing a particular technology; everyone who makes it must come to the owner for the specifications and pay for the privilege. However, there are no legal safeguards protecting this right. It must be constantly policed with force. The Charioteers maintain their monopoly on jumpkeys by throwing industrial spies out of airlocks.

Tithes

The Church's main method of income, collected from parishioners (serfs and freemen) and nobles alike. Refusing to tithe the Church invites holy war. It may begin with small threats but will eventually escalate into Church fleet engagements and even excommunication unless the money is paid. The local bishops set the "suggested" tithe amounts, which tend to vary with the seasons. The Church sets some of this aside to help fund disaster relief or crop failure.

Contracts

These work agreements are the main source of income for guildmembers. It is a legally binding agreement between the worker and his patron, usually enforced through the bureaucratic offices of the Reeves guild. Nonetheless, the rich routinely welch on their contracts, especially against independent freelancers or yeomen. They are much more careful about stiffing one of the major guilds.

Trade

Buying and selling items at a profit. This makes the seller a merchant, a strictly middle class function. The al-Malik are often accused of taking part in this petty activity, but they actually leave it to contractors like everyone else. There are affiliated merchants, those contracted by someone (house, guild, Church, Empire, etc.) to sell goods, as well as independent merchants, buying and selling on their own. The dangers are greater for the independents, but the profit margins are usually wider.

Workers

Employing workers to perform certain money-making tasks. This could be a crime network, a blackmail ring or some above-the-board activity such as artifact hunting. As head of the business, the boss takes the highest cut, but also suffers the bad times; workers must be paid through thick and thin, otherwise they will leave — or worse, take their pay from the boss's hide.

Investments

There are all sorts of investments a character can get involved in, from the risky funding of an artifact hunter's expedition to more stable investments in house, guild or Imperial bonds.

Bonds: Whenever a guild undertakes a major endeavor, it usually solicits investors to aid in the up-front costs of that endeavor in return for some of the profits. The investor gives money to the guild in return for a bond which can be redeemed for its value plus a fixed interest rate after a declared time has passed (usually the estimated date at which the guild will begin profiting in its endeavor). However, the guild has the option to refuse the redemption until a later date (usually only done if too many bondholders try to redeem their bonds at once). Noble houses occasionally solicit bonds (especially the minor houses), as does the Emperor.

Loans: Loaning money does not always guarantee a return, but defaulters can sometimes be sold to the Chainers to recoup costs. More often, however, credit can be extended to the loanee at higher interest rates. The problem with personal loans is that the loaner has to have some way of enforcing them. If she is managing house,

guild or Church funds, she can use the resources of these factions to track down defaulters. But when she makes loans with personal money, she has to handle the matter personally or hire someone who can.

The interest rate charged usually depends on the risk of loss and the danger involved. In addition to a standard rate, extra interest can be applied for late payment of loans.

Trust Fund: Placing money into a bank or giving it to a loan officer. This money will gain interest but the bank or loan officer can use it to provide other loans or undertake investments. The most trustworthy banks ensure their risks, but not all do. Individuals are often bilked out of their money when banks make bad loans with the individual's money and refuse to indemnify him for his loss. See Banks loans, below.

Credit

Below are the major sources of credit in the Known Worlds. Interest rates vary with the loaner and the risk involved.

Bank loans: There are many banks on many planets, most of them local concerns run by small guilds with purely local interests. Some of them span their globes, while some (rarer) are intergalactic in scope. The largest of these star-spanning banks are run by the Reeves, each of the major houses and the Empire. While the intergalactic banks are very stable, largely immune to local disasters, they also charge higher interest rates. In addition, it is very difficult to escape their loan reclaimers in the case of default.

Banks will rarely loan to individuals who have no reputation with them or if there is no reputable person willing to vouch for them. In addition, they are cautious about loaning to those without a permanent residence and a history at that residence.

Noble loans: Each house theoretically opens its coffers to its vassals in times of need. They will loan money to them under strict terms for specifically stated reasons. For instance, if a serf wishes to switch his livelihood from millirice farming to cattle, he can conceivably ask his lord for a loan with which to buy the cattle and rent land for their grazing. In return, the serf will pay the noble a percentage of the take on each head of cattle once sold to a butcher. This is in addition to the usual taxes levied on the serf's income. If the serf defaults, the noble takes the entire herd and all the money gained from their sale. He may also choose to enact further punishments against the serf.

Not all noble houses honor this relationship between the house and its vassals. While the Church tries to inculcate mutual responsibility in both nobles and serfs, it does not always take. The Hawkwoods have perhaps the best reputation here, treating their vassals with dignity and patience. In return, they have the most loyal serfs. The Decados are legendary for their harsh loans, wherein default is punished with slavery. The Li Halan will usually only loan to those vassals with virtuous reputations; a single drunken incident is enough to ensure a man refusal on any loan for the rest of his life.

Church loans: The sin of usury does not prevent the Church from making loans to some. The usual recipients are freemen suffering hard times, for the Church is forbidden to loan to serfs without their lord's consent. The Church either charges very little or no interest, but default has its consequences, usually a long period of hard labor building cathedrals. The Church will not make loans to those whose endeavors they feel are immoral or dangerous to Church interests. In the latter case, they will often petitions others not to offer loans either.

Guild loans: Perhaps the fairest and safest loans available are those offered by the various guilds of the Merchant League. The Reeves are the most notable here; one always knows where he stands with a Reeve contract — that is, if he can read the massive legalize. Guild loan rates are fair and repayment times are generous, while punishments are perhaps less severe than most, mainly in the form of repayment through labor. The Muster is the exception. Those who are unable to secure a loan from other parties are sure to get one from the Muster — just don't default or you'll wind up in chains on your way to the rock quarries of Bannockburn.

Individual loans: Individual patrons and investors can always be found willing to loan money to individuals or adventurers for their various endeavors. Personal acquaintance with the loaner helps here, but a friend of a friend to introduce you may work also. These rich individuals are rarely used to getting welched on, however, so their contracts almost always stipulate that, in case of default, the character becomes the property of the Chainers — they pay the loaner for his loss and then hunt the character down.

New Benefice

Expense Account (1 pt): Somebody else pays a significant amount of the character's debts, but only when the character conducts "official" business. This can cover work for the Empire, a guild, the Church or whomever, and the character will never have to pay this money back — unless the payer realizes how many of the bills had nothing to do with business. This counts as Good Riches, but the source of this money is extremely safe. Who is going to wipe out the Imperial Eye or the Engineers? On the other hand, the character cannot use this money for everything. He has to go somewhere to collect the money, and if he ever falls out of the group's good graces, than so much for the easy living.

Equipment Benefice Costs

The Benefice cost for certain items were omitted from the rulebook; suggested costs are given below.

Item	Benefice cost
Fusion cell	1 each
Grenade	2 each

Medical Gear

Physick's Kit	negligible
MedPac	1 (2 with Elixir)
Expedition MedPac	2
Surgery Kit	3
nanotech MedPac	5
Elixir	1 for injector, 1 per 5 doses

Communications

Muster Voice Box (Squawker)	1 (2 for wrist model)
Whisper Pin	2
Starlight LRCD	3

Light

Fusion Torch	negligible

Tools

Mech Tools	1
Volt Tools	1
High-Tech Tools	1 – 2 pts per piece

Security Systems

Thieves' Keys	1
Scrambler Pad	3

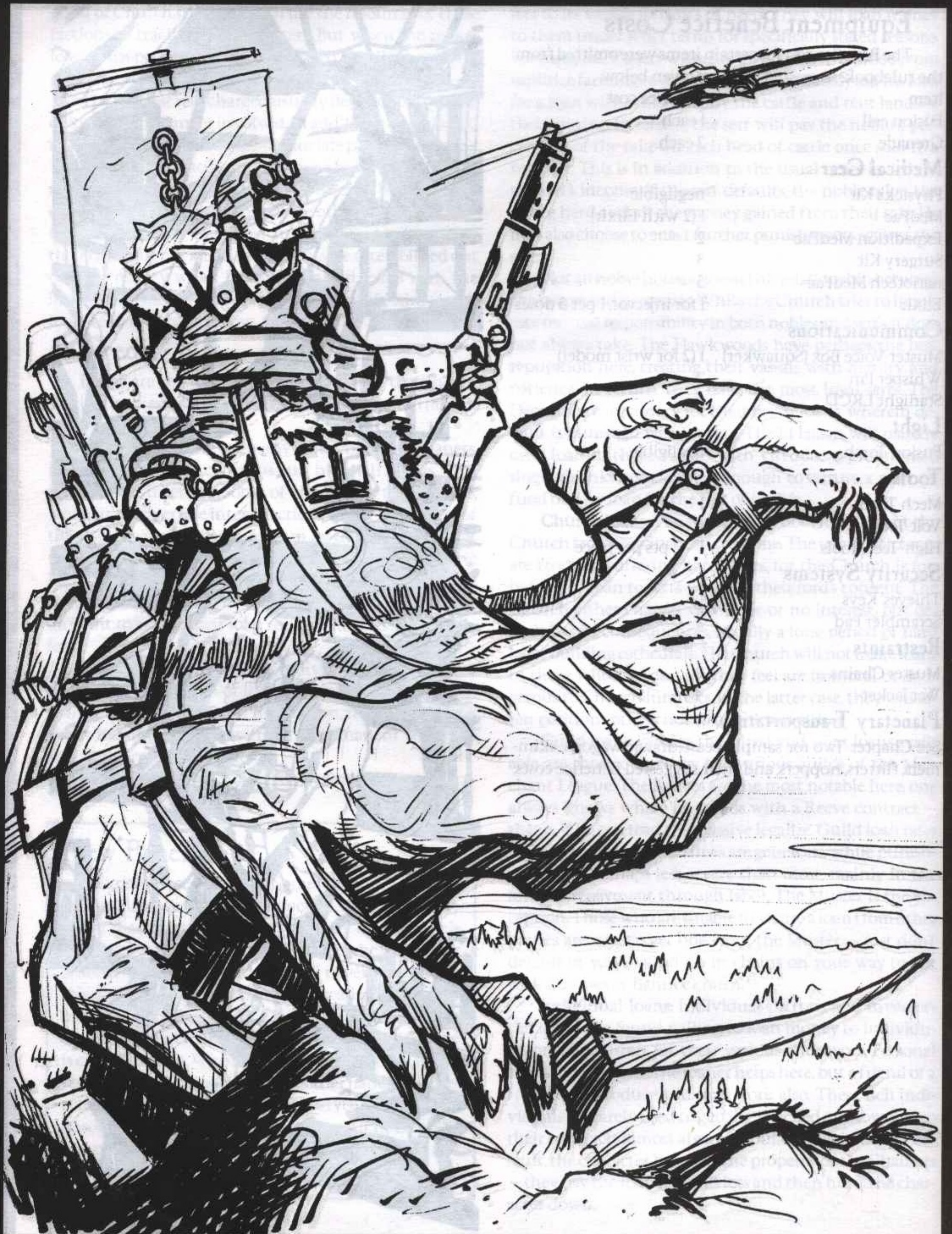### Restraints

Muster Chains	2
Wet Jacket	4

Planetary Transportation

See Chapter Two for sample beast-drawn wagons, skimmers, flitters, hoppers, and their suggested Benefice costs.

Chapter Two: Tools

Primitive Technology

Most serfs are so thoroughly indoctrinated with Church dogma that they actively fear and distrust anything above basic tech. Seen as almost magical, the sorts of weapons and tools available to nobles and guilds are viewed with a mixture of superstitious dread and awed amazement. For their part, more socially advanced persons often refer to uncomplicated tools and inventions as peasant or serf crafts rather than glorifying them with the term "technology."

Despite such sneering dismissals, there may be times when travelers must make do with less. Complex machinery, transports and weaponry may malfunction or break down somewhere far beyond the reach of a guildmember who can effect repairs. Theft may leave characters stranded or unequipped. Local conditions may dictate that characters shed their more advanced gear or be considered heretical and hunted for their arrogant use of "forbidden" objects. That's when they need to know what is available where, and how difficult using such "uncomplicated" technology can be. For those unfamiliar with the more humble tools available to the peasantry, it can be a true awakening to discover that the less advanced the technology, the more unwieldy and physically challenging it is to use. Any or all of the following may be encountered when the higher-ups go techno-slumming.

Transportation

For those more used to lounging aboard spacecraft or riding in powered vehicles, the transportation available to peasants and artisans may come as something of a shock. Both the local terrain and indigenous or imported animal life dictate modes of transportation. Heavy forests or swamps can rarely support good roads for long, as overgrowth makes keeping them clear a full time occupation. Even across plains and hills, roads are often little more than beaten dirt, which is dry and dusty whenever it isn't turned into mud soup by foul weather. Mountain cross-

ings can only be achieved through switchback trails which wend up the mountainside or natural passes, most of which provide little room for wide accessways. More advanced communities may lay down log roads (somewhat like a stationary raft) across swampy areas and pave village streets, but this is extremely rare. Bridges frequently consist of rickety wooden boards, tree boles or woven rope. In many areas waterways must simply be forded at the shallows.

The peasantry on most worlds make do with hand-pulled carts, sleds and travois. Those who have access to beasts often have larger wagons. Artisans and nobles living in such environs ride in coaches, chariots or rickshaws. Water transport is usually limited to rafts, barges and canoes. Many trading centers employ linked river rafts. When moving against the current, they utilize long tow lines attached to teams of burden beasts (either harnessed aquatic creatures such as the ichthia of Leminkainen or the slow-moving *brutes* found on most worlds).

Some worlds provide even greater challenges. Ice chutes, frozen lake surfaces and hard packed snow serve as main thoroughfares where winter's grip rarely loosens. Those who have adapted to such conditions, such as the people of Cadavus, make use of skis, snowshoes, sleighs pulled by the reindeerlike *oshogi* and ice gliders (somewhat like barges rigged with runners). Those with a sense of style or enough money prefer to ride on tamed *lyocels* (white, shaggy-furred predators resembling lions except for their lack of tails and manes). The leonine beasts serve as guardians for various monasteries on Cadavus and are often trained as war mounts by the Decados.

Flatlands and dry riverbeds mark the easiest routes in desert environments such as those found on Kish and Pyre. Camels and *pherizas* (strong, quick lizards with bad attitudes, but amazing stamina and tolerance for heat and lack of water) serve as riding and burden beasts. Wagons with large, sturdy wheels are lashed to *grolla crawlers* (large many-legged bugs reminiscent of gigantic brown ants) or *runner birds* (flightless avians similar to emu).

Jungle environments, like those found on Aylon, fea-

ture mammalian riding and burden beasts similar to elephants, but much smaller. These green, thick-skinned beasts, known as *shinda*, loyally serve whoever feeds them, but prefer lazing in river shallows to carrying burdens. If recent inquiries into the shinda's apparent intelligence prove their sentience, the practice of using these gentle beasts may stop.

Some worlds are even stranger, such as Madoc, where great aquatic beasts known as leviathans are harnessed to pull floating, nomadic villages across the seas. The creatures follow particular routes each year while feeding, tracking the movements of smaller sea life and the drifts of seaweed which form the majority of their diet. This allows meetings and trade among various villages.

On Ravenna, lofty cliffs and warm air currents have created a demand for flying mounts. Urrocs, huge fantastically-hued avians with wing spans of up to 60 feet, can be ridden if their passenger can learn the signals their trainers use to instruct them. Traditionally trained by a branch of House Trusnikron, those that have flown the same route often enough no longer need such instructions, merely repeating actions they have performed numerous times before. Rumor hints that House Trusnikron has used its position to train a small mounted army for its own use. Harnessed in pairs, urrocs can haul a ton or so of goods in giant nets slung beneath them. This requires a handler who sits in a special saddle atop the net and directs the creatures where to go and how to hover above a delivery site so the wares may be unloaded gently. As with rider urrocs, bearer urrocs can be trained to follow a learned procedure so that no trainer is needed after a time.

Each creature has peculiarities of shape and size that require different saddles, harnesses, burden baskets, bridles or halters, or even howdahs (tiny pavilions set atop the creature's back in which up to four people may ride). Some will tolerate no more saddle than a riding strap, while others will not respond to bridles with mouth bits, but must be guided through reins attached to nose rings. Those that haul or carry heavy loads require padding to keep them from injury. Aside from learning the correct way in which to attach straps and saddles, it is often necessary to learn the tricks such beasts employ to disconcert riders. The famous trick employed by urrocs, in which they inhale deeply and use the air to bloat their stomachs, has resulted in hundreds of harrowing near-falls from great heights as the saddle strap "inexplicably" loosens when the avians exhale. Neither natives of Ravenna or the Trusnikrons warn eager-beaver "I'll saddle my own mount" type neophytes of this, finding it immensely funny watching nobles slip sideways with the loosened saddle and desperately attempt to hang on until the urroc lands.

Tools and Work

Serfs are tied to the land and severely limited in their choice of tools. Almost all their work is performed utilizing back-breaking labor rather than complex machinery. In most communities, differentiation of tasks doesn't even exist. If a peasant cannot till the fields, fish, chop wood, construct a shelter, make his own tools and furnishings, care for animals, spin, weave, sew, doctor himself when sick or injured, and cook, he doesn't survive long. He may also be called upon to tan hides and make simple clay vessels for his own use. So long as his simple tools and furnishings are serviceable, crudity of form is overlooked. Serfs have little use for or time to appreciate artistry in any case.

In many areas, especially where terraforming never occurred or the world has slipped back into less evolved methods, farming requires much more than simply plowing, seeding and harvesting. Irrigation canals are almost unheard of except in extremely advanced communities, meaning farm workers must carry moisture to the fields in buckets hung on wooden poles slung across their shoulders. Picturesque thoughts of two small buckets thus suspended are erroneous. Carrying less than six to eight buckets at a time is nonproductive. Some have the luxury of beast-drawn carts filled with barrels that can be driven around the field and water dipped out where needed. Fertilization may be provided by dung or by ferrying seaweed up from the coast to the fields, where it must be spread out and turned every few days. Seeding is usually done by hand, with one worker moving ahead and spearing a hole with a pointed stick and children following and dropping seeds into the hole. These in turn may be just ahead of a third worker charged with pouring water on the seeds and covering the hole with dirt. Weeding, continued watering and harvesting are followed by gleaning the last seeds and burning the refuse before again readying the field for the next year's planting.

Depending on the area's available resources, serfs may be required by their nobles to fish, harvest sea wrack, mine for metals or gemstones, hunt, or shepherd the lord's animals rather than farming. Nets are the usual choice for fishing. They can be trawled from boats, as is the custom on Vera Cruz, where wooden framed animal skin boats, similar to Irish curraghs, set out before dawn and return only when the craft seems likely to be swamped by the weight of the catch. Motive power for the craft is by oar or paddle, or pole where the bottom is shallow enough. Some have sails, but are hostage to the prevailing winds. A few communities set out nets that are held afloat by air-filled buoys made of waterproofed skin or tarred canvas.

In other places, nets are stretched across rivers at two different heights, one under water to catch the fish, another in the air (from tree boles) to snare flying fowl attracted to the catch. Nets are only employed on the overlords' behalf, however. In many areas, it is forbidden for peasants to net fish for their own needs. The nobles fear over-fishing will deplete their riches, relegating serfs to

using fishing lines; some forbid peasants the right to fish at all for themselves. Hunting is treated similarly, with lines of peasants used as beaters when the lords wish to hunt. Individual hunting and trapping is occasionally allowed in more enlightened areas (especially where the fur trade is not important), but most serfs must place hidden trap lines where they think they can get away with it.

Limited strip mining, in which hundreds of peasants scrape away a top layer of soil to bare the riches underneath

Pherizas ("Spitters")

Pherizas are native to Kish and serve as the preferred mounts and burden beasts for desert travel. These eight foot long greenish-brown lizards possess suckerlike pods on their toes that allow them quick travel through sand or even along walls and ceilings (only the strongest can bear riders while walking slowly up walls). Their sturdy frames, legendary stamina, tolerance for heat and infrequent need for water enable them to survive for weeks at a time in the deep desert. They have been domesticated by the Li Halan and are now bred for both stamina and speed. Some of these have found their way to other desert environments, such as Pyre, where they thrive even near the famous Burning Desert.

Quote: "Did you see that sucker spit? I thought Halloran was a goner — it ate through his ceramsteel armor, for Prophet's sake!"

Description: Called "Spitters," wild pherizas have sacs along their inner jawline containing a caustic acid. They can spit this liquid up to 10 meters, covering an area about the size of a human. They use this acid to wound prey and to break down any tough hide it may have so they can reach the meat beneath. Pherizas live to be about 40, breeding between the ages of 10 and 30, when they lay two to six eggs each year. Those who have been domesticated have the caustic sacs removed, which must also be done to newborns sometime after their first year of life. The main danger unaltered pherizas pose is to those unfamiliar with them. The lizards are notoriously cranky, spitting at anyone who disturbs them when they are resting or feeding or doing nothing at all, but just feeling out of sorts. It is not unheard of for some altered pherizas to grow back their caustic sacs and those who deal with the creatures on a daily basis walk slowly and talk softly around them... just in case.

Body: Strength 13, Dexterity 6, Endurance 10
Mind: Wits 2, Perception 2, Tech 0
Natural Skills: Fight 4, Vigor 4
Weapons: Caustic acid spit. Pheriza acid causes 3 DMG, burning through clothing, skin or armor where it hits (ignore shields also). Roll Dexterity + Fight; Range 5/10.
Vitality: -10/-8/-6/-4/0/0/0/0/0/0/0/0/0/0/0

is most common. Shaft mining, in which a deep shaft is dug, a pulley erected and workers lowered down the shaft on a wooden platform to carve out cramped tunnels underneath, is utilized where veins and deposits lie deeper. Picks and shovels are most often used, with some few gouging implements employed to dig away inside the tunnels that may be no more than two to three feet high and wide. Baskets used to hold the metals, coal or gems are passed back along the line and lifted out via the platform. Candles or small oil lanterns held in headbands provide illumination.

In concert with the serfs, some artisans or crafters may provide community services that cannot be performed by the peasants. These include barrel makers, blacksmiths, glass blowers, candlers and lamp makers, boat builders, rope makers, millers and brewers. Communities that possess more than one such gifted tradesperson are extremely rare, however. Even less common are places where tanners, cobblers, tailors, furriers, and silk makers can make a living. An exception to the rule is on the Li Halan ruled world of Rampart, where the abundance of *gika worms* makes silk production an important industry. Conditions in Rampart's weather and terrain make silk the material of choice for both peasant workers and nobles, though the latter often wear brightly-dyed silk clothing rather than the raw silk available to serfs. Taking advantage of the unrest on the planet, bandits have begun raiding gika worm farms, stealing the valuable worms and production equipment. Anyone caught stealing or killing a gika worm is subject to execution on Rampart.

Tools used in the various pursuits include hoes, person-powered or beast-pulled plows, pitchforks, hammers, saws, chisels, scythes, rakes, needles, hide scrapers, potter's wheels, bellows, anvils, and axes. Threshing sticks, shears, pots and kettles, tongs, winnowing baskets, spindles and grindstones are also in evidence in most communities. Some of these, such as the scythe, axe and pitchfork provide the serfs with weapons as well. Even with terraforming, not all the threatening indigenous fauna have been eradicated; many such predators are attracted to cottages by the smell of food cooking or animals kept in the house or nearby barn. That unhappy peasants might utilize their tools against nobles is often feared, but rarely acknowledged openly.

Where more advanced tools are needed, looms, millwheels and block and tackle are employed. Water and wind mills and smoke houses dot the landscape. Energy is restricted to wind, water and beast power, with dried peat, dung, charcoal, wood and animal or plant oils providing fuels for fires. Sunpower is utilized for slow cooking meats and drying clothing or hay. Most villages depend on a single water source, such as a well or river. Regardless of whatever other duty they assign themselves, most Church officials carefully monitor any technology or fuel sources used in the area to make certain they do not pollute or poison the water everyone depends on for survival.

Communications

Communication is a luxury where roads may be almost nonexistent and travelers few. Radios are unheard of except among the upper classes, usually clustered around urban centers far from rural villages and farms. Written letters are rare except among the nobility and clergy; merchants and guildsmembers keep their own technical notes secret for fear of the Church, and most of the peasantry have fallen back into illiteracy in any case. Symbols (denoting various houses, Church affiliations, guilds and merchandise) and pictographic writing (frequently used to illustrate Church doctrine) are the norm. The common folk can easily interpret these without the need for more formal writing.

In those places where distance is a factor, smoke signals, drums, fires lit at night, and horns are all used to warn of strangers approaching or to call people together in times of need. Those who may be nearer, but unable to communicate normally, may use hand signals, whose meanings are known only to a select few. Several of these secret languages have become synonymous with those who developed them, most notably those used by many members of House Decados and the Silent Guard of House Justinian.

However communication is established, knowledge and information of any kind are valuable. Those who have nothing else often find that their knowledge of life elsewhere, political maneuverings and even the latest court gossip can fetch a high price when whispered in the right ears. Committing diagrams or other technical data to paper may also bring great reward — or a swift death from the flames of the Inquisition.

Medicine

Despite protests to the contrary, medical aid does exist in less advanced communities; it's just rather primitive. Midwives, tooth-pullers, herbmasters, veterinarians, leeches and chiurgeons all ply their trades wherever there are those ill or injured enough to need their services. Most simply call themselves healers and further inquiry into their specialty is needed to make a wise choice as to which one to consult about a given problem. Not all of them are ignorant butchers preying on the fears of the serfs — just most of them. While many at least understand the basics, such as washing their hands and cleaning their implements between patients, few have much more than rudimentary training or the tools needed to minimize pain.

A typical kit for any of the above healers consists of forceps, scalpels (though crude ones), hooks, scoops, surgeon's needles and waxed thread, bone saws, splints, bandages, cauterization tools, and possibly a selection of herbs. Some also engage in carpentry as a secondary line of work, carving crutches, wooden legs and other primitive prosthetics. Dental medicine consists of grabbing onto the affected tooth, yanking it out and minimizing the

bleeding. Childbirth is usually accomplished without resort to painkillers, as there are few drugs that will not severely impede the birth. Teas, salves, tinctures, balms, elixirs, and herbal soups are all used for various ailments. A few herbs, such as Vorox Root, have antiseptic properties and can be ground up and added to water to paint onto wounds. Pain killers, such as Black Leaf and Healers' Cap mushrooms, can control pain, but are highly toxic in higher doses. It isn't unusual for the attending healer to accidentally kill a patient while trying to control her pain.

Shelter

Regardless of terrain and other factors, all peasant dwellings have one thing in common: they are invariably made of the most ordinary, least costly indigenous material available. Where the nobles might import Gallana Wood from Gwynneth and stained glass windows to adorn their great manors, serfs live in adobe hovels, drafty log cabins, piled unmortared stone houses, and igloos. Roofs often consist of thatch laid down across the top and held in place by ropes with stones attached (so the thatch doesn't blow away). Some homes may be nothing more than mixed mud and sticks slapped onto a framework of animal bones. Where inclement weather rots houses as soon as they are built, many peasants live in caves.

Nomads may have cloth tents, hide tipis, rounded shelters similar to yurts, or — for those with the riches to buy such — even caravan wagons. Many who live in jungle environments construct grass or reed huts. A few build shelters up in the trees. Due to so many planets being terraformed, however, the majority live in housing not too dissimilar than those occupied by serfs in Holy Terra's dark ages.

A typical serf's home is built of wattle and daub (sticks mixed in with mud, and often dung). It has a thatched roof, which is broken only by a chimney or a smoke hole. All have some sort of hearth or fireplace used for cooking and heating the home. Rarely are there any room divisions beyond a loft. Most have dirt floors. Animals often share the same shelter, though sometimes lean-tos or stables are attached to the main house. Lofts hold hay, smoked meats, cheese, and bedding for the children. Below, furnishings consist of pallets, a trestle table with bench, stools, a chest or shelves for storage, a pot and pot hook for cooking at the hearth, utensils and crockery, and slop buckets. Entry is through a rickety wooden door with an inadequate wooden bar that can be dropped across the inside at night. Windows are merely holes cut in the side (with no glass in them), which have wooden shutters that can be drawn across them to keep out animals and the cold. Candles or lanterns may be used for lighting, though more often, firelight serves instead. Peasants typically have little to do after dark anyway, and the more flames that are burning in a house, the more likely one will be knocked over and set the whole structure ablaze — a not uncommon occurrence.
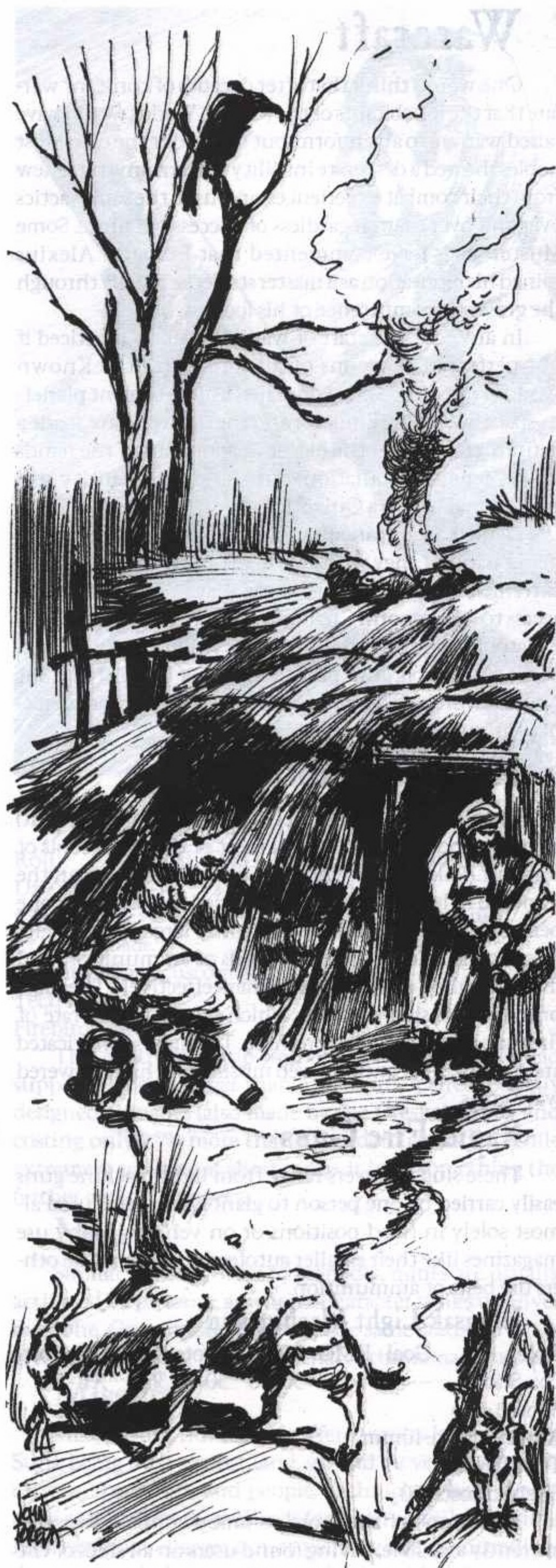
Warcraft

One would think that after decades of constant warfare that the inhabitants of the Known Worlds would have raised warfare to an art form, but that is not the case. Most nobles showed a desperate inability to learn anything new from their combat experiences, and used the same tactics over and over again regardless of success or failure. Some Muster wags have commented that Emperor Alexius gained his reputation as a master strategist merely through the grosser incompetence of his foes.

In any case, the craft of war is diligently practiced if not perfected. Weapons of all sorts litter the Known Worlds, from tiny, easily concealed knives to giant planet-to-space lasers. The Emperor and the Church have made a definite effort to get the bigger weapons out of the hands of the general population, but the sheer quantity still around makes this a Quixotic task.

Gamemasters can allow this sort of equipment into player hands if they wish, but many of these weapons are extremely unbalancing to game play. A character with access to a Furystorm Chaingun is more than a match for a platoon of normal house troops. Additionally, the expense of these big guns puts them out of reach of any but house, Church and guild soldiers, as well as some mercenary groups.

Heavy Weapons

Characters are more likely to encounter (and want) heavy weapons than they will most of the other tools of warcraft. This category includes weapons larger than the standard rifle but which can be carried into battle by one person. Most of these weapons utilize larger power cells, bigger magazines or different kinds of ammunition, and many require a crew to operate them effectively. The most primitive are slug throwers which have a higher rate of fire than do than smaller brethren. The most sophisticated are giant blaster cannons, web missiles and high-powered wave guns.

Rapid-Fire Guns

These slug throwers range from light machine guns easily carried by one person to giant chain guns used almost solely in fixed positions or on vehicles. Many use magazines like their smaller autofeed cousins, while others use belts of ammunition.

Jahnisak Light Machinegun

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	–	7	50/70	50	3(A)	XL	5*

* 1 per 3 clips

Ammunition: 10mm
Tech Level: 4
Firebird cost: 750

This is one of the more common support weapons currently available, having found users on all sides of the Emperor Wars. Small and not especially effective, it does continue the Jahnisak reputation for ruggedness and reliability.

Furystorm Chaingun

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	–	10	75/100	1000	3(A)*	–	10**

* The Furystorm does not have a single-shot setting. The above listing is for the equivalent of a six-round burst. More common is a ten-round burst, which decreases the initiative and goal roll by one each but increases damage by three. The Furystorm can also do the equivalent of an "empty clip" attack, with the same modifiers as for any fully automatic gun, but has enough ammo to keep it up for 10 turns! The same is true for firing a spread.
** 1 per 2 chains

Ammunition: .50
Tech Level: 5
Firebird cost: 1500

These rare, hand-crafted guns pack one hell of a punch. They lack a size rating because they cannot be used unless they are mounted on a vehicle or part of an emplacement. Not even a Vorox could hope to wield one of these monstrosities. These guns usually ended up defending dukes' castles or as the anti-personnel weapon on nobles' tanks. They got their name from the Brother Battles who used them in the war against Symbiots. Their only shortcoming is that their chains disintegrate during firing.

Energy Support Weapons

This category includes multiple-barreled lasers, giant blaster cannons used to punch holes in the strongest armor, and high-powered wave guns which can take out an entire line of soldiers with a single shot. Most of these are of Second Republic manufacture.

Gatling Laser

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	+1	7	30/40	115	2/10	–	15

Ammunition: Five fusion cells
Tech Level: 6
Firebird cost: 2500

Essentially five laser rifles linked together, this is the most prevalent energy support weapon. The attacker fires up to five shots as a single attack (he chooses how many barrels fire with each pull of the trigger); all these shots are resolved with one goal roll — they either all hit or all miss. Damage for each of these shots is rolled and compared to the target's armor separately. However, when shooting through shields, the total damage is instead combined (if damage leaks through the shield, the total is then compared against any underlying armor). This is an excellent way to burn holes in armor or penetrate someone's shield. These guns are often used for perimeter defense, but their lack of recoil also makes them extremely popular weapons for small vehicles.

Blaster Cannon

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	–	15	30/50	20	1	–	20*

* 2 per cell

Ammunition: Custom fusion cells
Tech Level: 7
Firebird cost: 5000

Less powerful than the fabled fusion cannon, blaster cannons appear on the best armored vehicles. They have superior armor penetration than do standard tank cannons, but are not especially effective against infantry units (they only kill one person at a time).

Mass Disrupter

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	+2	5	5/10*	3	1	–	15

* 10 meters is the maximum range at which this weapon has any effect

Ammunition: Fusion cell
Tech Level: 8
Firebird cost: 25,000

These large guns preceded the hand-held neural disrupters of the late Second Republic, but worked along the same principles. The mass disrupter, however, fires its waves of energy over a wide area. The waves quickly spread out to cover an area five yards wide, and everyone within that area is equally effected. If damage exceeds Endurance (or Psi, whichever is higher), the target falls unconscious. As the beam spreads, it becomes less effective, and characters farther than 10 meters from the gun feel little more than a vague discomfort.

Armor and shields do not protect against this damage, though a Psi Cloak does. Also, Psychics can roll Psi + Stoic Mind to deflect the energy stream, contesting against the attacker's successes.

Explosives

Explosives have long been a favorite of all soldiers ... except those on the receiving end. The basic fragmentation grenade, as described in **Fading Suns**, is a relatively common fixture, but is not the only type available. Other kinds include energy grenades, concussion grenades, incendiary grenades (favored by Inquisitors), gas grenades and flash grenades. These can be thrown or, if the right kind is available, fired from grenade launchers.

Blast Grenade

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Throw	–	12	10/20	1	1	S	3

Tech Level: 7
Firebird cost: 150

This energy grenade has a five-meter radius. Unlike other grenades, which are less likely to hurt people farther away from them, the blast grenade does the same amount of damage to everyone within that radius. Armor and shields work normally against this damage. These grenades are not available on most planets, and only the most elite military units use them.

Dreskel Grenade Launcher

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	+1	V*	15/25	1	1	L	5**

* The damage varies based on what sort of grenade is used
** 1 per grenade.

Ammunition: Custom grenades
Tech Level: 4
Firebird cost: 500

This relatively cheap weapon is often used for squad support. A little bigger than a shotgun, it fires specially designed grenades (also made by the Dreskel family and costing only 25% more than a standard grenade). While extremely accurate at short range, it loses something the farther away the target is.

Mines

Similar in many ways to grenades, mines are usually activated by pressure, as when a character walks or drives over one. Gamemasters can use the same statistics as are given for grenades, but should halve the damage radius.

Missiles

Missiles fill a number of different roles in the **Fading Suns**, being used against land, sea and air vehicles; fortifications; spacecraft; and people. Technicians have developed a wide array of warheads for them as well, including high explosive charges, armor-piercing shapes, incendiary devices, non-lethal shockers, and energy blasts.

Web Missile Launchers

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Warfare	+3	V**	75/100	1	1	–	10†

* (Artillery)

** The damage these missiles do varies based on what kind they are. High Explosive missiles do 20 dice of damage in the same way as a grenade. Armor piercing shapes only do 15 dice of damage, and only effect one target, but armor only gets half of its protection (roll all dice, divide by two and round up).

† 1 per missile

Ammunition: Web missiles

Tech Level: 5

Firebird cost: 1000 (Missiles cost 100 each)

The Web Missile Launcher allows its user to guide the missile via tiny, extremely strong wires until it hits its target. The user merely has to keep his crosshairs on his target and the missile does the rest of the work. It is conceivable (although unlikely) that a character standing next to the launcher could cut the wires before the missile reached its target. This Severe feat (-8 goal) would have to be performed in the same action that the missile was fired and would require an extremely sharp weapon, such as a wireblade or flux sword. If such a feat were successful, the missile would fall as soon as its wires were cut.

Artillery

Designed for use against targets out of the attacker's line of sight, these weapons almost always require more than one person to carry, and most call for vehicles or teams of beasts or slaves to move them from place to place. They can be used against people, vehicles or locations.

Primitive Weapons

This category includes those weapons which do not use explosives or fusion cells to do their damage. It includes the catapult, ballista, trebuchet and more. These are made by warriors who cannot afford anything better.

Catapult

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Wits+Warfare*	-3	23	50/100	1	1	–	5

* (Artillery)

Ammunition: Very big rocks

Tech Level: 1

Firebird cost: Varies. Most are built for immediate use and destroyed once the siege is over.

A catapult is a lever-operated device capable of hurling heavy stones with great force. Generally used against fortifications, it has great difficulty hitting anything smaller than the broad side of a barn. The example here is for a large one throwing a 25 kilogram stone. It has a maximum range of around 350 meters.

Artillery Pieces

Mortars, howitzers and rocket launchers are the favored artillery weapons of the Known Worlds. Some of these can fire huge shells as far as 20 kilometers away. Few guilds engage in their construction, however, and most are made to the specifications of the house making the purchase. For this reason, standardization is almost non-existent, and ammunition is extremely hard to come by if a character is not in the house's good graces. Even the Brother Battle order has very little artillery, relying on Muster contracts for this part of its job.

Li Halan Light Mortar

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Warfare*	-1	15	100/250†	1	1	–	15**

* (Artillery)

** 1 per shell

† The Li Halan mortar cannot fire at targets less than 30 meters away. It has a maximum range of 750 meters.

Ammunition: Explosive shells

Tech Level: 4

Firebird cost: 700 (Shells cost 25 each)

The Li Halan tried to develop an artillery piece which could be used by every infantry squad, but never managed to make this dream a reality. The Li Halan Light Mortar requires a two-person team to use and carry effectively, but still lacks the range and damage to make it a truly useful artillery piece.

Chemical Warfare

The Inquisition pounces on allegations of chemical-biological warfare as it does little else. More than a few of its members consider the use of these weapons as a con-

scious release of evil into the world. To the uneducated, these are not germs and bacteria but invisible demons let loose to do their worst. The fact that they are fired from space, dropped by planes, shot by artillery or let into the water by spies only makes them more frightening.

Diseases

Plagues terrorize the Known Worlds. During the Emperor Wars these diseases reached new heights. Aside from the common causes of disease, war destroyed what little sanitation most cultures had. Finally, all sides are rumored to have used chemical and viral weapons, though allegations have only been proven against the Decados.

Chemical Shells

One of the most feared of artillery shells is that which carries gas and poison instead of high explosives. Most feared is the Decados Pestulator Artillery, responsible for thousands of deaths and leaving many more people maimed for life. Of course, while the Decados have admitted to using this artillery, they claim they only fired Xaos gas, a non-lethal invention of the Engineers.

Xaos Gas

This powerful hallucinogen causes intense feelings of paranoia and brings out the absolute worst in people. Characters who come into contact with this gas need to score at least three victory points on a Human + Stoic Mind roll to avoid being affected (aliens should roll Alien instead). Those who are affected have to score at least three victory points on a Calm + Stoic Mind roll to avoid attacking those around them. This gas is most effective if inhaled, but the Decados did learn to mix it with an agent which could deliver it through the skin. Characters trying to resist this type only need to make straight Human and Calm rolls.

Combat Drugs

Another practice the Church frowns upon is the use of various combat drugs to enhance troop performance. Legionnaires often receive these to heighten their senses, inflame their passions, and increase their reflexes. Even spacecraft pilots have been known to use amphetamines before entering combat. The reasons the Church frowns upon their use is that it believes they interfere with judgment and contribute to pride and hubris. However, even Brother Battle warriors have been known to use these substances.

Klaj

This powdery substance, actually made from the root of the Aylon klaj plant, promotes a person's aggressive tendencies and brings his senses to a fever pitch. It can be taken orally, smoked or injected. Once in the blood stream, it increases a character's Passion by two and Dexterity by one. It decreases Calm by one and takes an hour to wear off. At the end of that time the character remains jittery, and her Calm decreases by another point until she gets a chance to sleep.

Plague Bombs

In his travels during the Emperor Wars, Bishop Xavier Holst tried to bring together many of the Church's teachings as warnings against sin and perdition. He used parables, legends and eyewitness accounts to hammer home the Prophet's messages. The following is one example regarding the use of plague bombs.

And when the frenzied squadron reached the plated walls of Ik-Tva, a ghastly sight greeted their disbelieving eyes. For, though not a stone of the place had been disturbed from its earthy bed, yet all within lay silent and unmoving, as if the Vuldrok had swept among them. Every last inhabitant of Ik-Tva lay strewn like grain: Senators in their cyan robes sprawled broken and twisted upon themselves beside tattered beggars whose skin was as gray as their rags. Skin sloughed from the skulls of good women mingled with flesh from the nether parts of harlots; the whole obscenely commingled in a noxious puddle that had been bone.

And as the squadron choked in horror, a tattered, emaciated scarecrow, cowled and robed all in green, emerged from the Great Hall of Ik-Tva. And though the wraithly visitant's countenance remained hidden from them, its voice echoed hollowly, as though rising from the depths of a subterranean tomb. And this it spoke unto them:

"Depart this place, for Ik-Tva the Mighty is no more, and the Pancreator's curse has decreed this place anathema, and henceforth its defiled walls shall enclose naught but legions of wailing ghosts."

War Beasts

With the decline of transportation technology, many nobles have taken to sending their troops into battle on animal back. Horses have made an especially significant comeback, and nobles from all the royal houses claim to be the best mounted warriors in the Known Worlds. Other animals have also come into common use, with the Xyll Warbeast being an infamous example.

Warhorse

A well-trained warhorse is a marvel to behold. A horse without such training is a danger to its rider and everyone around. Characters attempting to bring a horse without such training into a fight should have to make a Dexterity + Ride roll every turn to keep it from trying to bolt or throw her. On the other hand, a character with a warhorse may maneuver normally, and only needs to make such rolls if she or the horse is hit, or if she tries to do something special. Most warhorses are not trained to attack.

Description: Most warhorses are the extremely large and powerful Destriers, but other (smaller) horses can be used as well. The statistics below are for a standard Aragon Destrier.

Firebird cost: 5,000 (only noble characters can begin play with a warhorse; they need not spend Benefice points for this)
Body: Strength 12 (+3 DMG bonus), Dexterity 6, Endurance 8
Mind: Wits 4, Perception 6, Tech 0
Natural Skills: Dodge 5, Fight 3, Observe 3, Vigor 6
Weapons: Hooves 7 DMG, -1 goal and initiative, Bite 5 DMG
Vitality: -10/ -8/ -6/ -4/ -2/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Pherizas

Certain Li Halan desert units train pherizas to act as cavalry mounts similar to warhorses. See the write-up on Pherizas earlier in this chapter.

Xyll Warbeast

Certain unscrupulous noble houses specialized in using hordes of these vicious and unholy creatures for battles during the Emperor Wars. They were extremely effective in disrupting infantry formations and sending more superstitious troops scurrying for the hills. A Xyll is not ridden — it is loosed upon the enemy to enact a reign of terror.

Since the first Symbiot infestations, some people have specialized in gleaning what knowledge they can about the Symbiot shapeshifters. In the secret pay of noble houses and unburdened by moral codes, these scientists eventually tried to put some of their hard-won knowledge to use in genetic labs. The result was the Xyll Warbeast. But this thing is only sought out by those to whom winning is everything. All other considerations — dignity, honor, one's reputation, and even basic human decency — must be overcome before the Xyll is called upon. For the creation of the Xyll requires a human being, one who is vivisected alive and exposed to a synthetic DNA structure based on that found in battle-slain Symbiots (the only near-safe specimens). As the DNA begins to grow and replicate throughout the poor victim's cell structure, he is transformed over a number of days into the rapacious and uncaring Xyll. No remnant of its former humanity is apparent and it exists only to rend and tear. Even feeding is a secondary urge to the horrible Xyll.

Besides the obvious drawbacks for unleashing Xyll (excommunication, untold horror and misery guaranteed to equate their master's name with sheer evil), there are the less-known but suspected dangers: Symbiot infestations seem to increase on worlds where the Xyll have walked. It may take years or generations to be noticed, but such infestations do arise. The Xyll leaves its mark on the lands and minds of its victims, as well as on history.

Description: These eight-limbed, scorpion-like monstrosities have giant claws on their tails, sword-like forelegs, giant, rattling mandibles, thick chitinous armor and a single multifaceted eye. Most can attack three times a turn without negative modifiers. Some have wings, poisonous bites or additional senses. Most are about the size of a horse, but much larger ones have been spotted.
Body: Strength 10, Dexterity 7, Endurance 10

Mind: Wits 4, Perception 5, Tech 0
Natural Skills: Dodge 3, Fight 6, Observe 2, Vigor 6
Weapons: Forelegs 5 DMG (+1 initiative), Bite 6 DMG, Tail 8 DMG (-1 initiative)
Special Powers: Each Xyll has its own special power. Some may have wings, allowing them to hover over a battlefield, diving down to spear infantrymen with their forelegs. Others may have corrosive spittle strong enough to eat through tank armor. The gamemaster should get creative with the unique powers found among a Xyll horde.
Vitality: -10/ -8/ -6/ -4/ -2/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Powered Armor

Ceramsteel armor, while providing amazing levels of protection, has nothing like the reputation of true powered armor. While almost all ceramsteel armor has servo-enhancers to allow people to move while wearing it, true powered armor does more than allow its user to walk around. The best makes its wearer stronger, steadies his hand, provides audio and optical assistance, increases his maneuverability and affords life support.

Adept Robes (Cassock Superior)

Defense	Str	Dex	Benefice Cost
7 + 7D	+2	+1	20

Firebird cost: 4500
Modifications: The standard suit of Brother Battle Adept Robes gives its wearer 30 minutes of life support, built-in range finders, 10x binoculars, radio sending and receiving, and protects him from skin-contact poisons and dangerous levels of radiation. Some have added hoverpacks, additional leg servos for faster running and incredible leaps, built-in weapons (especially flamers) and more.

The legendary powered armor of the Brother Battle order is among the best in the Known Worlds. Each owner modifies hers as she sees fit, and when she no longer needs it, passes it on to a worthy novitiate who will continue the process. Some of the oldest suits have been worn by dozens of holy warriors. Others have added Psi cloaks and holy relics. Nothing provides more comfort to someone in danger than the sight of someone in Brother Battle Adept Robes. Nothing is more feared than the idea that that person might be infected by Symbiots.

Adept Robes cannot be bought with firebirds; they can only be earned by Brother Battle adepts.

Ship-to-Planet Combat

Most spaceships are not optimized for use in an atmosphere. They lack streamlining and appropriate engines, making them fly like bricks. A decent atmosphere fighter will almost always bring one down. On the other hand, spaceships can sit up in orbit and rain down fire on targets which have no way to respond. Their main weapons for this purpose are plasma bombs and meson cannons, though most of their space weapons will do. House Hawkwood even took to firing heat-resistant bricks down on their enemies. Coming in at terminal velocity, these

Mercenaries

Older mercenaries look back at the Emperor Wars as the golden days of their profession. Younger mercenaries point out that every job during that time was guaranteed to wipe out most of their company. They claim that work is at least as common today, far more interesting and a lot less fatal. Instead of leading assaults against heavily armed legions, they are protecting ambassadors in barbarian territory, preventing uprisings in exotic lands, exploring alien ruins, battling pirates in space, hunting down antinomists and more.

Most of these mercenaries work under the auspices of the Muster, but this is not a requirement. It is a good idea, however, for the Muster knows about far more mercenary contracts than does anyone else. Additionally, the Muster tries to verify and ensure the quality and reputation of its members, giving them well-deserved prominence in their field. Independent mercenaries are likely to be less capable, more treacherous — and cheaper.

Most mercenary groups are small, based on a core of two to ten people. This core can hire more people as the contract requires, but can handle most simple jobs on its own. One officer, usually the leader, is responsible for obtaining contracts and meeting with clients, while another officer takes care of the group's training and brings new recruits up to speed. One officer will command the troops once they are in the field, and another will obtain the equipment necessary for the job. Sometimes one person will handle more than one of these duties, but top-flight groups have separate people handle these duties while others command air resources, artillery and other parts of the operation.

would devastate anything they might happen to hit.

Planets have a hard time responding to these attacks. Even most laser beams tend to disperse through the atmosphere until the damage they can do is almost negligible. Only the very largest guns have any effect against craft in orbit. Since these are not limited by the size of the ship carrying them, however, these guns tend to grow very big indeed. The most common are planet-to-space laser, mesons and missile guns. Similar in many ways to their space-borne brethren, they tend to do even more damage. They will usually do 50% more damage than the equivalent space weapon.

Planet Shields

Even at the height of the Second Republic, no one developed a technology that could protect an entire planet from orbital attacks. The best they could do was come up with limited planet shields which could protect key installations. These usually drew on geothermal

power, tapping deep into the planet for the energy they needed. Many of these still exist, well-maintained by each planet's rulers.

Planet shields create an energy canopy with a radius of approximately 20 miles. This canopy hovers approximately a kilometer high in the air. Planes and hovercraft can fly under it, and spacedocks can use their tractor beams to bring landing spacecraft around it. These energy shields are the equivalent of an assault spaceship shield, but they have no limit to the number of times they can work.

While planet shield complexes have been sabotaged in the past, doing so was almost completely off-limits during the Emperor Wars. Maintaining these shields is not too difficult. Building new ones is practically a lost art.

Space Drops

While freefall from orbit became a popular sport during the Second Republic, the technology to do this safely has been lost. What few attempts there were to do this during the Emperor Wars failed miserably, and no house is thought to be working on it now. On the other hand, some Charioteers have developed small one-person landers capable of surviving re-entry. These plummet to the ground until they reach a mile from the ground, at which point their landing engines kick in. They have very limited maneuverability, however, and characters should hope that they are not over an ocean. Only a couple of these float.

Specialized Legions

During the Emperor Wars, a number of houses developed specialized infantry units capable of performing under the most adverse of conditions. These included ranger legions of trained jungle fighters, assault legions capable of penetrating the most heavily defended locations, powered legions encased in ceramsteel armor, and Decados tracker legions renowned for ambushes and sabotage. Two of the most famous, however, are the Marauder star legions and the Grimsons, feared (for good reason) throughout the Known Worlds.

Marauders

As the shortage of working spacecraft grew, every house eventually developed its own star legions, soldiers trained and equipped to fight in the void of space. As the spacecraft closed for battle, these troops would empty from innumerable airlocks and hurtle toward the enemy ships. Their objective was to board the enemy vessels and take them over without damaging them too severely.

Marauders generally train in such skills as Spacesuit, Demolitions and Melee. Their standard tactic is to close with a ship, fasten to it with magnetic clamps, attach explosive charges to bulkheads, blow their way in and then defeat the crew with small-caliber slug guns, stun guns, swords, spears and axes.

These are also known as some of the most insane legionnaires, because their powered suits do not have much fuel. Should their side lose a battle, or should they fail to make contact with a ship, they will often end up drifting in space until their oxygen runs out the next day.

Grimsons

At the height of the Emperor Wars, a number of different houses began experimenting with chemically enhanced soldiers. Out of these experiments came the Grimsons, heavily armed and armored berserkers capable of incredible feats of bravery — and cruelty. It took years of training and biological modifications to create one of these soldiers, and their expense precluded ever making them common legionnaires. Instead they became among the most elite of troops, capable of battling armored vehicles on equal terms.

Now that the Emperor Wars are over, the Grimsons legions have been cut back. Church censure has kept the Emperor from making them a standard part of the imperial army, though no one can deny that individual Grimsons have joined up. By the same token, the royal houses have closed their training bases, though no one doubts that a few still exist in secret installations. The **Fading Suns Players Companion** will provide more information on these fearsome warriors.

Tactics

Standard tactics at the start of the Emperor Wars were pretty limited. Generally nobles would lead a mix of well-armed knights and poorly trained peasants straight at one another. What few armored vehicles there were would run down as many peasants as they could before turning their guns on one another. The nobles would rely on their shields and a generous supply of fusion cells to keep them safe, engaging in their own battles and heroics. Generally the fight would go to whomever had the most nobles on his side.

Prince Darius Hawkwood was the first to try changing this. Fascinated from childhood with tanks and similar vehicles, he began using mass armored formations, artillery support and planned maneuvers to confound his opponents. At first the other noble houses raised a great cry of indignation (a noble could get hurt this way), but soon all had adapted his techniques, and the Decados and Hazat began improving on them.

By Alexius' time, mixed unit tactics had become common. Kestrals (hovertanks) soared over Mastiffs (heavy tanks), using their autocannons to wipe out those Direwolves (tank-killers) which survived the artillery bombardment. Trained infantry legions moved among the vehicles, protecting them from concealed web missile batteries. Commandos and Grimsons served as emergency reserves, moving quickly to fill gaps and exploit opportunities. And nobles had moved to the back, watching the battle from the safety of armored command posts.

Imperial Fireteams

Alexius' generals established the five-person fireteam as the standard infantry unit, and they have begun to implement this in the Imperial army. The standard team includes one commander (generally a corporal), three armored rifle troops and one lightly armored legionnaire with a support weapon. Alexius' men are also trying to standardize the Empire's weapons, giving the fireteam commander either a submachinegun or a shotgun; the armored troops scale mail and Imperial rifles, and the support legionnaire a leather jerkin and either a Drexler light machinegun or a Dreskel grenade launcher.

Imperial Rifle

Roll	Goal	DMG	RNG	Shots	Rate	Siz	Cost
Dx+Shoot	–	6	40/60	10	2	XL	2*

* 1 per clip

Ammunition: .40
Tech Level: 4
Firebird cost: 200 firebirds

Nearly a dozen guilds and an equal number of Imperial armories are making these cheap, low-quality rifles. The rifles are now finding their way into the black markets of every planet where there is an Imperial military base.

Vehicles

It is not uncommon for the serf taking his goods to market in a beast-drawn cart to look up and see his lord flying overhead in a skimmer. The serf knows that there is no way she will ever be able to afford anything better and accepts that as the way things are. Characters, on the

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Combining Benefice Points

In the **Fading Suns**, few individuals own vehicles. Nobles and guild members who want to get around can use crafts belonging to their faction, but had better take care of them. Getting one of these damaged is a sure way to lose status. Additionally, characters will have a great deal of difficulty taking one of these off-planet. While they can certainly rent transportation, nothing beats having your own craft.

Characters can combine Benefice points in order to begin the game with a vehicle. They need to decide among themselves who the official owner is, and this character does not necessarily have to be the one who put in the most points. Getting their own vehicle after character creation has ended should be a drama in itself. Perhaps it is a reward from a grateful guild or the reason a noble house is hunting them. Vehicles are too rare for someone to just use his Riches benefice to purchase. There are certain modifiers a character can take to bring the cost down; see the Spacecraft Benefice in Chapter Four: Starships.

other hand, almost never accept such discrepancies, and the following section covers many of the vehicles they may find themselves in — or under.

Vehicle Traits

Fading Suns rates vehicles for a number of different factors. Speed rates the vehicle's top level, though how fast it gets to that point (or how quickly it can stop from there) depends on the vehicle's quality. Armor shows how much protection it provides both its own internal machinery and its occupants. Fuel lists what powers the craft, while Range refers to how far it can go on a full tank, fusion cell or before its team has to rest. The Cargo trait details just how heavy a load a vehicle can carry. The People rating show how many people are needed to drive the craft and how many can ride in it under normal conditions. Finally, Cost lists the vehicle's Benefice expense if a character hopes to start the game with it.

Drive Rolls

Characters with the appropriate Drive skill do not need to make rolls to handle normal driving conditions. Gamemasters should only force them to make rolls when they try to do something special (jump over a herd of brutes) or something unexpected happens to them (someone has cut the air brakes on their skimmer). Failed Drive rolls can mean anything from losing a race to going off the road to running into a mountain. Complementary skills include local Lores. Knowing the terrain will always help.

Sample Drive Roll Modifiers

Penalty	Condition
-1	Bad Road (ground craft only)
-2	Inclement Weather
-3	Pedestrian in Road
-3	Hairpin Turn
-4	Unexpected Obstacle
-4	Sudden terrain change (skimmers only)
-5	Cut Off

Chases

The success of characters in catching or escaping other people is primarily determined by the quality of their own vehicle. The faster it is, the more likely they are to win a chase. The only time gamemasters need to worry about more details is when both the pursued and the pursuer's vehicles are similar. In this case the gamemaster will want to establish the number of victory points a side will need to accumulate on a sustained Wits + Drive rolls in order to win the chase (usually 10 more than the other side). The roll should be modified by various conditions: darkness helps the pursued while having a transmitting bug in the escaping vehicle helps the pursuer.

Collisions

When the gamemaster decides that the character's vehicle runs into something, he has to decide just how much damage both the vehicle and the occupants take. In a head-on collision, damage equals one die of damage for every 10 km/hr of speed for both vehicles as well as one die for each of their armor **dice**. In a rear-end collision, the gamemaster should subtract the lead vehicle's speed and armor dice from the rear vehicle's speed and armor dice and then roll the damage as above. Finally, in a side collision, or when the vehicle runs into a stationary object, she should roll based solely on the speed of the impacting vehicle and the armor dice of what it is running into.

The damage applies to both the vehicle and the occupants (though the gamemaster might want to roll the damage separately or have each player roll it for their characters). The vehicle's armor also protects both the vehicle and its occupants, and the occupants' armor also protects them. Shields work normally, but seat belts and air bags are not common features in **Fading Suns**.

Attacking Vehicles

When attacking a vehicle, characters have the option of aiming for the vehicle or the occupants. Occupants get to treat the vehicle as cover, usually reducing the target number by four or six. If the vehicle is moving, then the attacker should have another -2 penalty, and if his vehicle is moving, then that should provide yet another -2. Misses have no effect on the occupant or the vehicle, except to break out a window if the gamemaster likes.

If attacking the vehicle itself, any damage the characters do over the vehicles armor takes away from its Vitality. As the vehicle takes more damage, its driver will have a harder and harder time keeping it under control, as represented by the listed subtractions. Gamemasters should feel free to get descriptive with just what this damage is (broken axle, cracked engine, floor disintegrates, etc.). When the last level of Vitality gets marked off, the vehicle no longer functions (the engine is destroyed, both axles fall off, it blows up, etc.) and is probably not redeemable. Gamemasters should feel free to apply damage which exceeds both the vehicle's Armor and Vitality to its occupants.

Characters can also target specific parts of the vehicle to attack. For instance, aiming for the repulsor pads of a skimmer might have a -4 target number, but the gamemaster can rule that any damage to it will reduce the skimmer's speed, and that damaging all four will bring it to the ground. The most commonly targeted vehicle parts are the tires on ground craft. Hitting the tire on a moving vehicle is a tough task (-6), and it has 1 + 1D armor. If penetrated, the tire deflates or, if enough damage was done, blows up. The driver has to make an immediate Dexterity + Drive roll to stay in control, and this and all future rolls

are at -3. A ground craft can continue driving with all its tires blown out, but it will be at -12 to any drive rolls, and will suffer permanent damage. Its top speed will be 10% of what it normally is.

Beast Craft

The most common vehicles in the Known Worlds are powered by the muscles of beasts, slaves and serfs. These include brute carts, carriages, and Li Halan rickshaws. On poorer planets, even nobles use these vehicles more than any others.

Brute Cart

Speed	Armor	Fuel	Rng	Cargo	People	Cost
6 km/hr*	2+2d	Feed	50 km	1 ton	1/12	0

* Brutes can only maintain this pace for a short time. Usually the cart travels at half that speed.

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0 (Brutes have their own Vitality levels)
Weapons: None
Tech Level: 1
Firebird Cost: 10

This rugged cart appears anywhere brutes are found, and is a preferred means for getting crops to market. Most serfs who own one built it themselves or inherited it from their parents. They yoke a team of two to eight brutes to the cart and away they go. The above traits are for an unloaded cart with a two-brute team. Extra brutes will not increase the carts speed (brutes can only run so fast), but they will increase the amount of cargo they can pull.

Landcraft

These vehicles appear most frequently on planets with good road systems — a distinct minority of the Known Worlds. They may be powered by the wind, steam, fossil fuels, electricity, fusion cells or solar power, and use either wheels, tracks or skis for movement. The guilds use more of these vehicles than does anyone else, relying on them to move goods and people from place to place. Nobles prefer skimmers, which cost more and carry less.

Scraver Open-Back Scrounger

Speed	Armor	Fuel	Rng	Cargo	People	Cost
90 km/hr	5+5d	Gas	600 km	500 kgs	1/9	9

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0/0/0
Weapons: None
Tech Level: 4
Firebird Cost: 3000

The Scravers developed this vehicle ostensibly for artifact hunts in areas where roads are bad, but have found it very useful in smuggling goods along back roads. It features a sturdy cab which can seat up to three people, an open cargo area in back, oversized tires for off-road driving and large, side-mounted gas tanks. These are the most dangerous part of the vehicle, for they risk blowing up if punctured. Critics say this is actually a positive feature, for it gives Scravers an easy way to destroy the evidence.
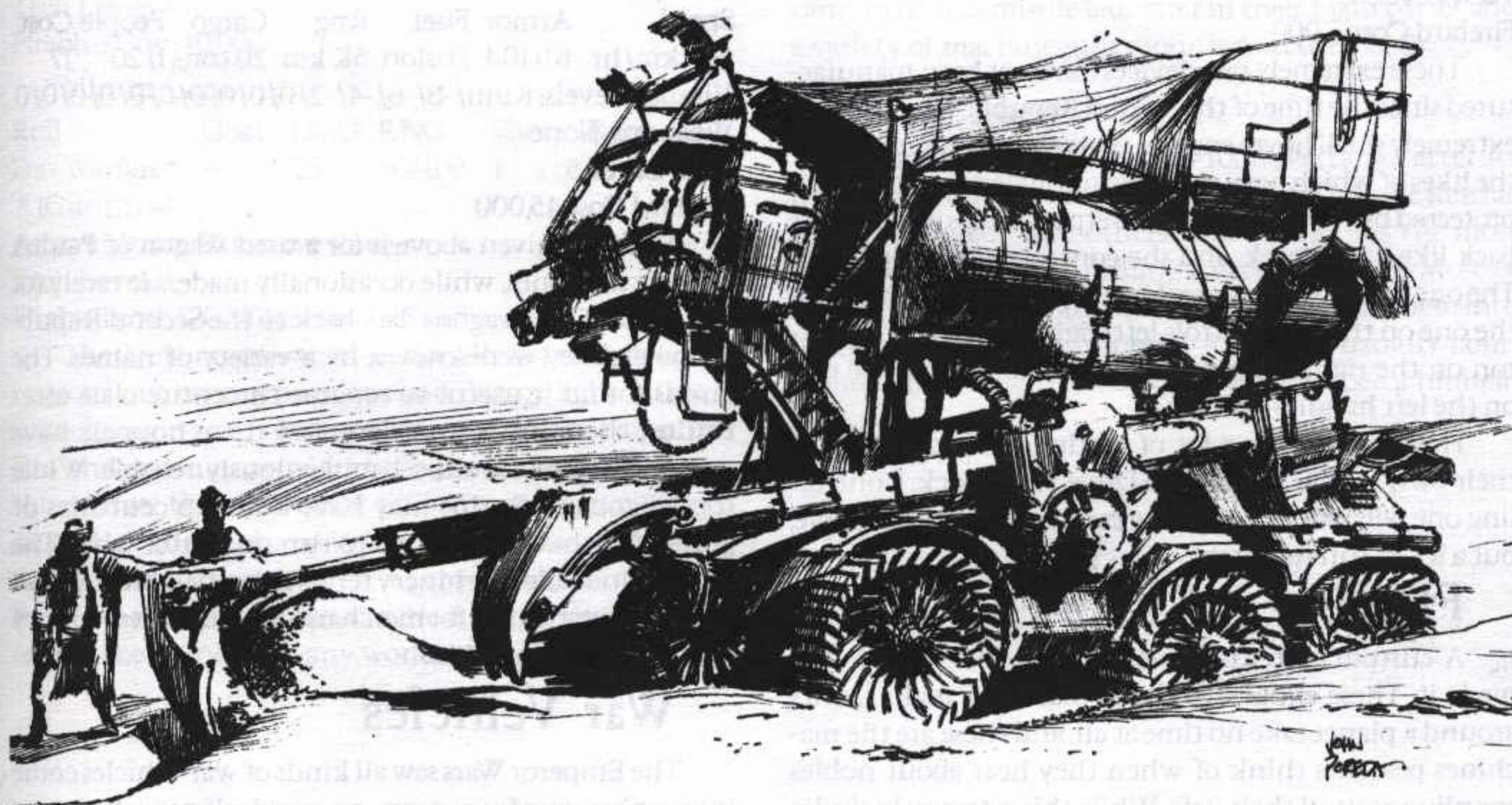
Skimmers

Most popular among the nobility and rich League members, skimmers travel at heights of up to 250 meters and at speeds of several hundred kilometers per hour. While they zip over all kinds of terrain, drivers still need to be careful because sudden terrain changes can send a skimmer plummeting. For this reason pilots rarely fly them high over cities, for fear that the streets and buildings may acts as canyons. Most people in skimmers prefer to follow roads, and only the cockiest will speed over unfamiliar terrain.

Hoverbike

Speed	Armor	Fuel	Rng	Cargo	People	Cost
250 km/hr	2+2d	Fusion	450 km	20 kgs	1/1	10

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0
Weapons: None
Tech Level: 5
Firebird Cost: 9,000

Young nobles are the biggest fans of hoverbikes, racing one another wherever they meet. Peasants are the biggest enemies of the hoverbikes, often run down by racing nobles. In any case, these small, fast craft are fairly rare, rarely having been produced since the Second Republic. They provide very little armor, for their pilots sit on them, not in them. Most of their parts also have very little protection.

Hoverpack

Speed	Armor	Fuel	Rng	Cargo	People	Cost
120 km/hr	1+1d	Fusion	75 km	–	1/0	8

Vitality Levels: Ruin/-8/-6/-4/-2/0/0
Weapons: None
Tech Level: 6
Firebird Cost: 7,000

These extremely rare devices have not been manufactured since the time of the Second Republic. They feature extremely small hover engines, marvels of miniaturization the likes of which have never been equaled, and a fuel cell protected by the engine. The hoverpack straps on to a user's back like a backpack, and she controls it via two levers. The one on the right controls up/down movement while the one on the left controls left/right movement. A button on the right determines acceleration while the one on the left handles braking.

Hoverpacks take a lot of getting used to, and have their own special Drive skill: Drive Hoverpack. Controlling one without any training can be next to impossible, but a lot of fun to watch.

Flitters

A custom flitter is the surest sign that a noble has made it. These expensive flying machines make jaunts around a planet take no time at all, and these are the machines peasants think of when they hear about nobles traveling around their fiefs. While this category includes everything from propeller-driven biplanes to custom antigrav yachts, most people think of the grand noble air yacht when they think of these vehicles.

Air Yacht

Speed	Armor	Fuel	Rng	Cargo	People	Cost
750 km/hr	8+8d	Fusion	3K km	2 tons	2/12	20

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0/0/0/0/0
Weapons: None
Tech Level: 6
Firebird Cost: 25,000

The air yacht is a true luxury flitter, capable of flying at high speeds or hovering imperiously off the ground. Its crew consists of a pilot and co-pilot, both of whom need the Drive Aircraft skill. While one person can pilot it in a crisis, two are always recommended. It can seat 12 passengers in extreme comfort, and more if needed. Of course, an air yacht's traits hardly reflect its true value. Its primary purpose is to impress other nobles, and to this end its owner will customize it in a dozen different ways — reentry ability, gold trim, retractable roof, arboretum, in-air torture chamber, etc.

Hoppers

The guilds' answer to the flitters, hoppers are far more utilitarian than are flitters. Most consist of little more than engine, wings, fuel tanks and as much open cargo room as possible. They reach altitudes of almost 20 km, and pilots have been known to transfer cargo from space landers to hoppers high above the prying eyes of customs officials. Very few nobles would agree to ride in one of these dirty, oil-streaked monstrosities, but members of the League swear by them — maybe because the nobles won't get in them.

Wagon of Paulus

Speed	Armor	Fuel	Rng	Cargo	People	Cost
500 km/hr	10+10d	Fusion	5K km	20 tons	1/20	17

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0/0/0/0/0/0
Weapons: None
Tech Level: 5
Firebird Cost: 15,000

The price given above is for a used Wagon of Paulus, because new ones, while occasionally made, are rarely for sale. Most of the wagons date back to the Second Republic, when they were known by a variety of names. The guilds found it useful to rename the entire class after Paulus, the saint of travelers, and these hoppers have proven themselves almost miraculously reliable. While the Wagons of Paulus may have built up centuries of grime, they have continued to run no matter what. The most vulnerable machinery tends to be their life support, especially worrisome for merchants who use these to ferry goods down from orbit.

War Vehicles

The Emperor Wars saw all kinds of war vehicles come into use, ranging from steam-powered self-propelled guns to fusion-powered assault hovercraft. Armored battles

became all the rage during the 4970s, but proved far too expensive. Instead, armored units served primarily as infantry support, though a few nobles (especially among the Hazat) preferred to lead their troops from a tank at the front of the battle.

These vehicles are far too difficult for most individuals to own or maintain. Some mercenary groups own their own, but most are the property of houses or guilds. Of course, the Church has its own collection of war vehicles, as does the Brother Battle order.

Armored Vehicles

This category includes motorcycles, all-terrain scout vehicles, transports, tanks, tank killers, self-propelled artillery, assault guns and more. Each house had its own standards and nomenclature during the Emperor Wars, but the Hawkwood terms are becoming more common now that they have been implemented in the Imperial Army.

Greyhound: scout tank
Pitbull: medium tank
Grim Reaper: anti-personnel tank
Direwolf: heavy tank
Tank Killer: antitank vehicle
Violator: assault gun

Greyhound

Speed	Armor	Fuel	Rng	Cargo	People	Cost
75 km/hr	9 + 9d	Diesel	400 km	1/2 ton	3/9*	25

* The Greyhound can carry one extra person inside and 8 on its chassis
Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0/0/0/0/0/0
Weapons: Most Greyhounds sport a 50mm gun or blast cannon along with a single light machinegun.
Tech Level: 4
Firebird Cost: 10,000

50mm Gun

Roll	Goal	DMG	RNG	Shots	Rate	Siz
Dx+Warfare*	–	15	50/100	1	1	–

* (Gunnery)
Ammunition: Explosive shells
Tech Level: 4
Firebird cost: 1700 (Shells cost 15 each)

The Greyhound is an exceptionally fast tank designed to scout out enemy positions and engage light infantry units. Its main gun is useless against more heavily armored foes, and its armor provides little protection against anything larger than a grenade. Still, it moves quickly both on and off the road, and it provides its crew with a good field of view. During the Emperor Wars, all the royal houses made use of some variation of this design, and it can still be found on many worlds.

Stealth Technology

By the end of the Emperor Wars, rumors abounded that various houses were fielding stealth tanks, made invisible either by legendary discontinuity generators or demonic contracts. Soldiers returned from patrols warning of tanks which appeared out of nowhere, ambushing them and their companions. The most credible accounts came from Li Halan legionnaires defeated on Criticorum by the al-Malik. They described wraith tanks with powerful fusion cannons. The tanks would appear when they shot and then fade away again. They could not be detected by infrared goggles, radar or any vision-enhancing equipment.

Hovertanks

The pride of the Hawkwood legions, hovertanks proved effective in a wide variety of jobs. They served as scouts, mobile reserves and shock troops, capable of attacking ground units from in front, the flanks, behind or above. While not as fast as armed flitters and not as well armored as ground vehicles, they mixed superior mobility with advanced weaponry and highly trained crews. Emperor Alexius has been hard at work trying to add these to the Imperial Army.

Kestral Hovertank

Speed	Armor	Fuel	Rng	Cargo	People	Cost
175 km/hr	10 + 10d	Fusion	600 km	1/2 ton	4/2	35

Vitality Levels: Ruin/-8/-6/-4/-2/0/0/0/0/0/0/0/0/0
Weapons: Most Kestral Hovertanks have either a blaster cannon or web missile launcher in their main turret and a variety of machineguns mounted on their body.
Tech Level: 6
Firebird Cost: 40,000

House Hawkwood named its hovertanks after its members' favorite birds of prey. Thus there was the Kestral, Peregrine, Falcon and others. The Kestral was the most common, capable of fulfilling a variety of roles. Most of these are owned by individual nobles who lead them into battle. Those in the Imperial Army are usually commanded by freemen but owned by the Emperor himself.

Psinapse Crucible
(End.688)
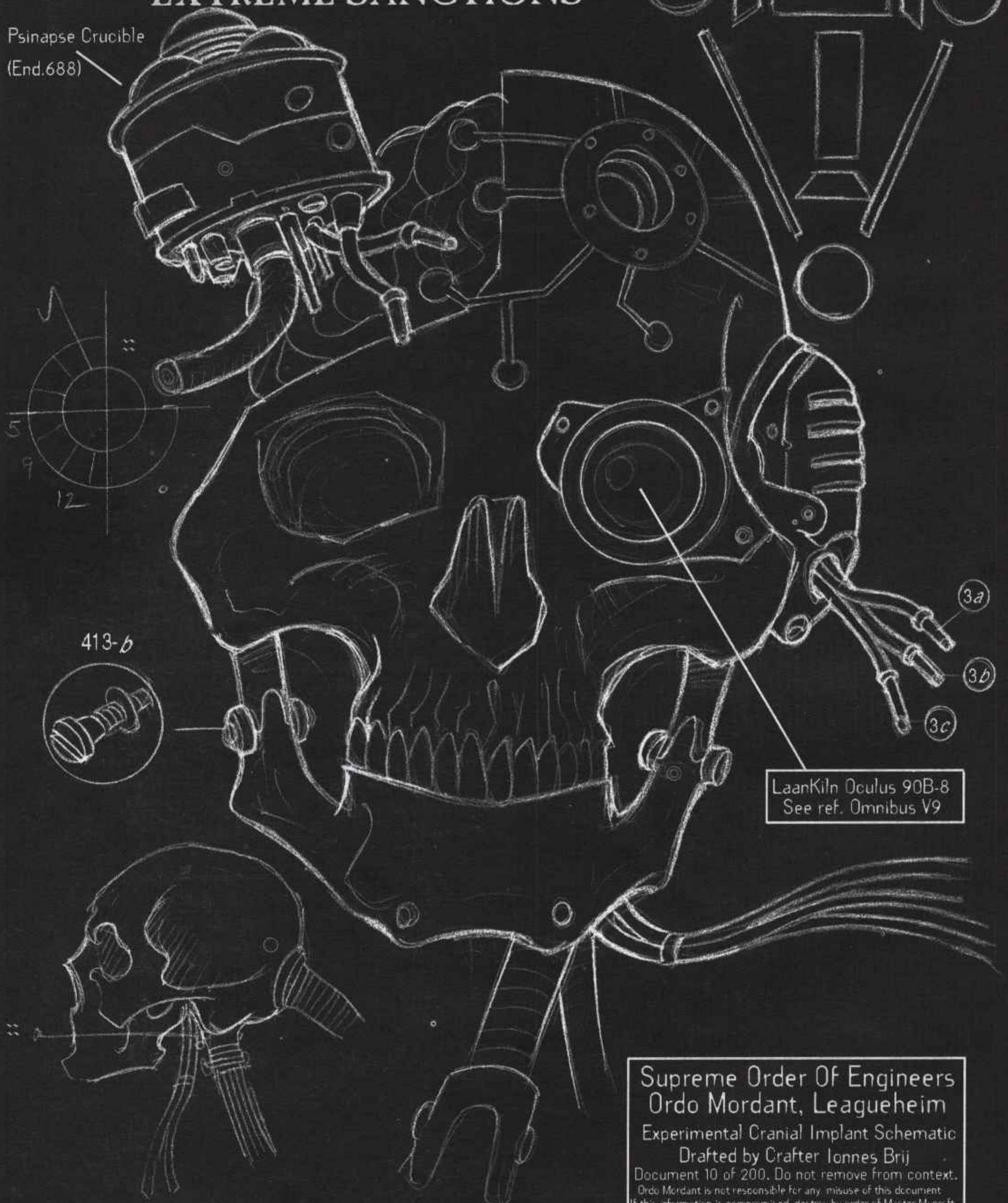
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See ref. Omnibus V9

Chapter Three: Man and Machine

Technology never exists in a vacuum — it influences and is influenced by the people who use it. Tech doesn't evolve for its own sake, but evolves as a complement to the abilities of those who use it. When its capabilities advance beyond what humans can control, the result is a society of people who exist for the sake of their machines, not the other way around. If men do not master their machines, then machines will assuredly master them.

For this reason, the Inquisition watches personal technology very closely. Rebuilding civilization depends on reconstructing a human society that includes humane morality and a system of philosophy that shows deference to the wisdom of the Church. Those who indulge in personal technology recreate themselves in an image of their own making, not the image the Pancreator intended for them. While the Church values humanity and humility, people who become one with their machines become aliens in the midst of human society.

This chapter shows a variety of personal technological devices that have the potential to disrupt the Church's vision of what humanity should be. Although some of the devices here seem innocuous, they all have the potential to extend what humans are normally capable of achieving. Cybernetic implants extend the physical capabilities of humankind; think machines expand a human's mental capacities; golems act as companions, servants, or slaves. As Engineers and other scientists reconstruct the tech of the Second Republic, they redefine the boundaries between man and machine.

Cybernetic Implants

Simply put, cybertech relies on the science of installing tech inside the human body. This can be desirable for any number of reasons, ranging from altruistic motives for enhancing the human body to deviant urges of cyberfetishism and criminal tendencies. The simplest of cybertech might be little more than a plastic device grafted onto human flesh or a small smuggling compartment hidden inside a human body. The most elaborate coordinate a number of high-tech devices and may involve the installation of a valuable think machine.

Actually hooking up with cybertech can be difficult. Just having the firebirds to afford it isn't enough. After acquiring the proper tech, the prospective user also has to find a cybersurgeon or cybertech engineer who can install it. Many low-tech surgeons keep a low profile, trying to compensate for the amount of risk they live with by inflating their prices and allying with sub-legal fixers who act as intermediaries. High-tech surgeons affiliate with powerful and wealthy patrons who can offer them protection, and their employers may require favors or compensation before they allow surgeons in their retinue to perform freelance work.

Furthermore, any installation (after character creation) is a gamble. Critical failure on a surgery roll can result in slow physiological degradation, psychological maladjustment, or technological breakdowns at crucial moments. The capabilities of any cybernetic implant is limited by the skill of the surgeon, the quality of the device, and the wisdom of the user. Caveat emptor.

Cybernetic Costs: Rules Revision

The **Fading Suns** rulebook provides a somewhat unwieldy system for purchasing cybernetic devices. Hence, this new system is offered instead:

When purchasing cybernetic devices during character creation, a character must spend Extras to buy cybertraits. The costs are given in parenthesis next to each cybertrait. In the rulebook, those cybertraits with a "+" (plus) sign give the character a number of Extra points to spend on cybernetics. However, this should be replaced with a "-" (minus) sign to represent that the cybertrait subtracts from the total cost of the device. Thus, some devices with a total negative number may give the character Extra points (much like a Curse or Affliction), which he can

spend anywhere he likes.

Use the following cybertrait to purchase modifiers to characteristics or skills:

Enhanced Characteristic/Skill (2 pts per +1): The device enhances a character's natural characteristic and/or skill. Each modifier to a characteristic or skill is considered to be one cybertrait; thus, a device which adds +2 Perception is considered to have two cybertraits (each +1 is one cybertrait). The gamemaster is the final judge on whether or not a device can enhance a particular skill or not — usually a think machine is required to boost Lores or other knowledge-based skills.

Through this device, the character can exceed his normal racial maximum score for that characteristic or skill, possibly even beginning the game with a trait over 10. The exceptions to this rule are Tech, and the spirit characteristics Ego, Faith, Human and Alien, none of which can be raised through cybernetics. While certain cybernetics can modify behavior (affecting Passion or Calm, Extrovert or Introvert), they cannot change overall attitudes, such as one's Faith. Neither can they impart an understanding of scientific paradigms (Tech), although they may inform a character about certain subjects (a think machine data base).

It is conceivable that a device may be able to enhance a character's Psi (gamemaster's discretion), but no known cybernetic device (save perhaps an Annunaki artifact or Church relic surgically attached to a character) can raise the Theurgy characteristic.

Cybertraits

Almost all cybernetic devices make their recipients less human (or less Ur-Obunish, Ukarish, etc.). In other words, less normal. Even when the implants are concealed, their bearers may seem odd, somehow not in line with the rest of their culture, race or whatever. This is represented by the Alien trait. A character can only possess so many cybernetic devices before his mind or body rejects them. The higher his Alien trait, the higher the rejection threshold. A character is allowed a total number of cybertraits equal to double her Alien trait. Johanna the Scraver with an Alien of 3 can possess up to six cybertraits (in any combination of devices).

It is possible to modify cybertraits so that they do not count against the total allowed — see CyberTherapy, below. Characters will want to keep a tally of their cybertraits with each device, noting which ones count toward their total allowed and which ones do not.

In addition, some cybertraits do not count against the total cybernetics allowed by the character's Alien trait. Such is the case with the following traits:

> CyberNut
> Expert Tech
> Skill Use
> Tech Use

For example, an Ether Ear (from the **Fading Suns** rulebook) counts as three cybertraits against a character's

total allowed: Concealed, Cybersense (Radio) and Delicate are counted, but Skill Use is not.

Experience Point Cost

The preferred method of gaining cybernetic implants after character creation is to spend experience points. When calculating costs, figure that one Extra point costs three experience points. However, those cybernetic devices which have a total negative cost (those which give the character more Extras to spend), do not give the character more experience points.

Gamemasters should be careful when allowing characters to purchase cybernetics with experience points. They cannot simply conjure them from the air; they must first find the desired device and a cybersurgeon to install it. And no amount of experience points will guarantee safety from the Inquisition — if the character buys proscribed (illegal) cybernetics, he may become watched or hunted by the authorities.

Firebird Cost

Cybernetics ain't free or cheap. Besides the cost of the device, the surgeon also exacts a fee. When a character spends experience points for his cybernetics, he must also pay the firebird cost. However, the gamemaster may allow for a discount, considering the experience points to represent a favor owed by the merchant or surgeon, or a rare privilege accorded members of his house, sect or guild.

Since **Fading Suns** has a point-based growth system, requiring characters to spend experience points to improve themselves, characters can usually only buy cybernetics with experience points, in addition to firebirds — the devices are, after all, now a part of the character, not just pieces of equipment. Nonetheless, gamemasters can veer from this rule if they like, allowing characters to simply spend money instead of experience.

Cyber Device Costs

The rules revisions presented here change the Extras costs for some of the cybernetic devices given in the **Fading Suns** rulebook. Below are the correct costs, along with the total number of cybertraits which count against the bearer's Alien trait allowance:

Device	Extras cost	Cybertraits
Cyber Limbs	12	6
Engineer's Eye	11	5
Ether Ear	2	3
Goliath Skin	10	7
Internal Think Machine	7	4
Lithe Wire	7	5
Omnisocket	5	2
Shoulder Mount	2 (+weapon+1)	1
Spy Eye	6	4

New Cybertraits

Cancerous (-3 pts): The device is deadly to organic tissue, either through some chemical reaction or due to slow radiation leakage. This is a slower, long-term version of

Burns Flesh. Instead of the immediate, painful but healable effects of that cybertrait, this one takes a while to be felt. Two to three months after installation, the first signs will become apparent: blotches on the skin, hair loss, fatigue, etc. Even if the device is removed, the cancer will still exist, slowly eating away at the character. It is said that certain Second Republic medical technologies could cure cancer or push it into remission, but such tech is long lost. Rumors of holy men or women who can heal such cancers abound, but they usually lead to charlatans rather than true healers. Installing this device is a death sentence. The recipient of a cancerous device will be dead within two to three years. This does not prevent some unscrupulous nobles from equipping secret, elite combat legions with cancerous but powerful devices, unbeknownst to the soldiers.

CyberLung (varies): This device allows the bearer to breathe a different medium (water, methane, etc.) than his native one (oxygen).

Cost	Effect
4	Water: Character can extract oxygen from water and breathe underwater as he does in air. If this is not Concealed, then some sort of gills or venting system is obvious. This assumes fresh water or salt water; if the liquid is a soup largely composed of chemicals other than hydrogen and oxygen, the character must buy Gaseous, below.
7	Gaseous: Character can breath in one gaseous medium (methane, nitrogen, ammonia, chlorine, florine, sulfur, carbon dioxide, bromine, radon, liquid halogen, etc.). This does not make the character immune to any acidic or allergic effect the chemical/gas may have on her skin; it simply allows her to breathe the medium rather than asphyxiate in it.
10	Vacuum: Character can either recycle his own oxygen (or other medium he is capable of breathing) or he has an extra supply. In the absence of oxygen, he can still breathe for a number of hours equal to his Vigor. This does not allow a character to survive decompression, only to exist in it without a constant supply of oxygen. Once the character has left the vacuum (or other airless medium), he must "recharge" the oxygen in his cells by spending a number of hours breathing it equal to the number of hours spent in vacuum.

Fused (1 pt): This cybertrait applies to equipment, such as a weapon or tool (wrench, sonic screwdriver, etc.). The piece of equipment has been surgically attached, clamped down or fused to the character, becoming a part of her anatomy. The item cannot be disarmed or removed without lengthy surgery. Unlike most equipment or weaponry attached to an Omni-Socket or Shoulder Mount, this item does count as a cybertrait toward the character's Alien trait allowance.

Unpredictable (-1 pt): The device sometimes acts in

New Benefice

CyberTherapy (4 pts per cybertrait): This Benefice only applies to a character who has received a cybernetic device(s). The character has received specialized training with her implant which allows her to more fully integrate it into her body and psyche. Such training is extremely rare, for few people now remember the arcane Second Republic psychological and physical regime once widely practiced by cybersurgeons. The process utilizes hypnotherapy, meditation (visualization of integration), and carefully coached physical exercises. It requires a coach who can train in all these fields: he or she must know the learned skills Hypnosis, Social (Teacher) and Focus. The total process takes at least three months of uninterrupted study to complete.

CyberTherapy is a Benefice which modifies cybertraits; cybertraits subjected to CyberTherapy do not count against the character's Alien trait when figuring the maximum number of cybertraits allowed. It is conceivable that a character could — after undergoing CyberTherapy for each of his devices — have more cybernetic implants than his Alien trait allows. However, since a good cybertherapist is rare, the character will have to pay highly for such services. The average three month session can cost 3,000 firebirds. This does not include basic living expenses for those months.

The Benefice cost is 4 points per cybertrait which does not count against the character's Alien trait allowance. It is possible to have limited CyberTherapy which only partially modifies a device. For instance, Johanna has an Engineer's Eye (five cybertraits), which means she must have an Alien trait of 3 or more (remember, you cannot possess more cybertraits than twice your Alien score). Johanna's player decides to get some CyberTherapy to better integrate Johanna and her mechanical eye; she purchases 8 points, which means that only three of the Engineer's Eye's cybertraits are counted against Johanna's total allowed by her Alien trait.

ways not counted on by its user. This could be caused by a variety of reasons: shoddy workmanship, an unfinished prototype, corrupted memory structures (in the case of nanotech), etc. Anytime the character rolls a critical failure when using the device, it begins to act up in unpredictable ways. This usually lasts for a number of turns (or hours) equal to the character's Alien score, but if the device has been misused or unmaintenanced, the effects may last longer.

Weaponry (varies): When installing weapons with cybernetics, the Benefice cost of the weapon (if any) +1 is the base Extras cost to include the weapon into a cybernetic

device. The weapon itself does not count as a cybertrait; only other cybertraits in the device are counted (such as Fused, Concealed, etc.). The character does not have to spend points to purchase damage dice; they are determined by the weapon type.

When creating specially manufactured weaponry (such as the Arm Harpoon, later in the chapter), the gamemaster should create a weapon cost comparative to the existing costs for weapons such as guns and blasters, taking such things as damage, range and number of shots unto account.

Most weapons require a goal roll of Dexterity + Melee or Shoot. Some weapons may require a special skill, in which case the device should also have the Skill Use cybertrait.

A spring mechanism to hurl a knife or sword from a concealed sheath or a mini-rocket attached to the weapon can turn a melee weapon into a missile weapon. The actual range should be decided upon, but it is unlikely that a spring-loaded knife would have better than 5/10 range.

Cybernetic Substances

Cybernetic devices have traditionally been constructed from a wide variety of materials, ranging from 21st century sculpted plastic to Second Republic nanotechnology. Not all tech is created equal. Engineers are best able to gauge the quality of tech by first inspecting the materials from which it's made. It is possible to create higher-level tech from lower-tech materials, but the result is serious impairment in the function of the device. (In game terms, the tech's Quality rating is reduced.) If a craftsman is as good as his tools, cybertech is as good as its substance.

Devices made from the following substances should have these cybertraits:

Friendly Plastic (-1 pt): Low-tech street tech is crude at best. With the exception of some mechanical body parts, many of the earliest 21st century cybernetic devices were external. Utility was more important than form, and carrying external tech in 21st century society carried a social stigma as well. Zaibatsus were able to mass produce friendly plastic to lower the cost of their cybertech, thus increasing their all-important profit margin.

For the most primitive of cybertech, look to the Scraver's Guild first. They've managed to lure a few of the less capable cybertechnicians into their ranks. "Quick and dirty" is their motto. Backwater worlds harbor meat clinics where ambitious street scum can pay for low-quality and highly visible street tech. Their TL5 handiwork tends to resemble the cybertech of the 21st century — external, bulky, and unreliable. Street tech is easily recognized by the substance from which it's made. Millennia ago, the zaibatsus marketed it as "friendly" plastic. Today, it's a sign of inferior craftsmanship.

This material is easily grafted onto human skin, but it's vulnerable to extreme heat, as well as certain chemical compounds that are used to mold it. These devices are inorganic; once damaged, they cannot heal. For this reason, if a device is constructed primarily from friendly plastic, reduce its point cost by 1 and subtract 100 firebirds from the cost of the device.

Synthflesh (0 pts): As the science of cybernetics became more common, aesthetic concerns became more important. TL6 cybertech is typically internal; any external components are carefully sculpted to improve their artistic appeal. In the earliest days of the Second Republic, humans who could afford to patronize cybersurgeons either requested completely internalized tech — to avoid the stigma of having it — or flaunted their enhancements as an artistic statement.

Sophisticated cybertech has a structure that's similar to the flesh and bone with which it is integrated. This level of sophistication has been made possible by the rediscovery of synthflesh. Each year, the Church destroys more black market factories where synthetic flesh is produced, but each year, more apprentice cybersurgeons learn how to manufacture this compound as part of their early studies.

Aside from its usefulness in cybertech, synthflesh can facilitate the healing process — a medic who attempts to heal a wound by "bandaging" it with synthflesh gains a +2 penalty to his goal roll. The substance is more durable than normal flesh, but it cannot heal itself. Further loss of synthflesh has to be replaced with another application. The cost is about 20 firebirds per application.

Synthflesh does not count against the character's cybertrait allowance unless a significant portion of her body has been altered with it (two or more limbs, or the entire abdomen).

Nanotech (4 pts): At the pinnacle of the Second Republic, the cutting edge of body modification involved using microscopic "machines" to rework the human genetic structure. After changing weak flesh to versatile silicon, nanotech engines were able to gradually reform human viscera into ruthlessly efficient cybertech.

Some of the surviving samples of nanotech have suffered from corruption of their memory synapses. A few experiments have been conducted at the Academy Interatta involving these rare specimens, but all of them have resulted in tragedy. More precisely, twisted, tortured genetic monstrosities have freely slaughtered hapless victims in the hallways of that august university before collapsing under their own obscene physiognomy. There are rumors that a few silicon skeletal remains have survived. There are also rumors of a sanitarium on the grounds that contains the half-insane technicians who dared to unleash what man was not meant to know.

If this level of tech was easily mastered, no doubt it could become a great boon to humankind. The human genome structure could be modified in any manner imagination could conceive. However, this level of technology (TL8) is so poorly understood in current times that

injecting any human with recovered nanotechnological culture is virtually murder.

The bonus to nanotech is that it is always considered Concealed, is Tech Level 8 (efficient) and does not count against the character's cybertrait allowance. The drawback is that it requires Expert Tech to repair. Many models are Unpredictable (cost is -1 pt; see Cybertraits, earlier in this chapter).

Cyber Devices
Body Enhancements

Prior to the Church's Inquisition, the most common application of cybernetics was to improve the human body. At the end of the 20th century, the prevailing idea was that physically challenged humans would be able to regain their "normal" senses or acquire new ones to make their lives easier. This quickly progressed into the 21st century idea that people should then have the right to become superhuman.

Unfortunately, given the unpredictable nature of salvaged tech, the lucky few who are cybernetically enhanced are hardly "more human than human." Wise adventurers recognize the need for emergency back-up cybertech, but these implants do not always function in an emergency. Foolhardy adventurers who desire to become spacefaring metahumans often self-destruct after acquiring physical rejection syndromes, falling prey to megalomania or other psychoses, or succumbing to simple cases of enhancements failing at critical times. Perhaps it is better to limit one's enhancements.

Flesh Cavity

TL6: (5 pts) Concealed, Tech Level 6
Cybertraits: 1
Firebird cost: Cost: 250
TL7: (6 pts) Concealed, Tech Level 7
Cybertraits: 1
Firebird cost: 300-500, depending on size.

Enhancing the human body through cybertech is a gradual process. For many potential cyborgs, the first cybersurgery operations involve creating one or more cavities of flesh inside the body. Once installed, a flesh cavity can be used to hide almost anything small enough to fit. A few internal organs are either removed, simplified, or replaced with small cybernetic organs. The cavity is then lined with a material that is (hopefully) resistant to scanning and a "door" of synthflesh is used to cover it.

Possessing a flesh cavity is not an illegal act, but if you are found to possess one, others will suspect you of being a criminal. The Church watches these deviants, and they are also especially eager to track down the black market surgeons who possess the knowledge to install basic cybertech. Anyone who possesses a modicum of social status will find it easy to dissuade the Inquisition from taking action, as the technique itself is not strictly proscribed. The tech required for this type of operation can vary from TL6 to TL7.

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TL6 cavities are typically quite small and cannot hold devices beyond one or two cubic inches at the most. However, this displaces very little human viscera, and as such, the cost is relatively inexpensive. The majority of cybernetic surgeons can create a minor cavity rather easily. TL7 cavities have more complex methods of shielding their contents from scanning — they cannot be scanned with surveillance devices below TL7.

For every five times a flesh cavity is opened, the user must layer the area with another dose of synthetic flesh. Note that items that require a flesh cavity include the cost of creating one in their price.

History: By the earliest years of the Second Republic, the process of replacing internal organs with smaller and more efficient cybertech became a legal and acceptable operation. Using such cybernetic organs to create larger cavities increases the cost of installation considerably, but allows for the installation of more exotic devices. One example of this technique involves removing one of the lungs and replacing it with a small oxygen supply. (For a more elaborate version of this device, see the Oxy-Lung, listed below).

Oxy-Lung

Proscribed
(16 pts) +1 Vigor, Concealed, CyberLung (Vacuum), Organic, Tech Level 7
Cybertraits: 4
Firebird cost: 1000, +400 for the surgery

The Oxy-Lung is a device that allows humans to survive for long periods without an outside oxygen source, such as in deep space. One lung is replaced with an efficient recycling system that allows the body to convert carbon dioxide back into oxygen for one hour per point of Vigor the user has.

History: Before this operation became illegal, Oxy-Lungs were used as a back-up oxygen supply for spacers or divers who could afford them. Some nobles have been known to undergo the operation as well if they plan to spend considerable amounts of time in deep space. Cutting off the oxygen supply from a space suit is one of the easiest methods of assassination, and some nobles would just as soon attempt to fake their deaths by living off an Oxy-Lung in such situations. This device is proscribed largely because a number of cyborgs hunted by the Inquisition have used it in similar circumstances.

Aqua-Lung

(7 pts) +2 Vigor, Organic, CyberLung (Water), Tech Level 6
Cybertraits: 4
Firebird cost: 750, +500 for the surgery

Artificial gills that can extract oxygen from water. More advanced version are known that conceal the gills.

History: Aqua-Lungs were popular during the Second Republic among artifact divers on Madoc searching the vast Annunaki ruins beneath the waves. The relics they brought to the surface more than paid for the devices.

X-Eyes

Proscribed

TL6: (5 pts) Cancerous, Cybersenses (X-Ray Vision, 6 pts), Removable, Skill Use, Tech Level 6
Cybertraits: 4
Firebird cost: 600, +200 for surgery
TL7: (9 pts) Concealable (partially, 2 pts) Cybersenses (X-Ray Vision, 6 pts), Organic, Removable, Skill Use, Tech Level 7
Cybertraits: 4
Firebird cost: 900, +350 for surgery

This costly enhancement is detested by both law enforcement officials and would-be criminals. It allows the user to see through layers of solid matter, both organic and inorganic. The simplest use (at TL6) involves modified x-rays, although this often results in a variety of cancers in the flesh and olfactory centers. More progressive variants reflect the history of passive scanning devices — TL7 X-Eyes can see through TL7 shielding, and so on.

Adjusting to X-Eyes can be an extremely tedious process. In fact, learning the fine points of operation is a skill in itself. Proficient users can effectively see in the dark, learn to scan organic life forms for tech or disease, or diagnose mechanical devices. Untrained users may become blinded by sudden revelations of electromagnetic fields, overreact to misjudged distances or imagined threats, or simply go violently and psychopathically insane after observing the viscera of too many passers-by.

History: In the early days of the Second Republic, interplanetary spies who used X-Eyes rarely used them for more than a few days before having them surgically removed. Later, underworld meat surgeons improved black market versions to help their clients stay on-guard against intrusive scanning methods used by the police. By the time the devices were legalized on some worlds, corporations were ready to market their use for a variety of professional tasks, from nuclear physics to medicine.

It is impossible, however, to fully conceal TL7 X-Eyes when they are activated. Unlike the Engineer's Eye, this device resembles a normal human pair of eyes when it is not in use. When activated, however, X-Eyes emit a dim, red glow. Usually, a cyborg who needs to use this device surreptitiously either wears dark sunglasses or places a hand over her eyes.

Concealed Weapons

Cybernetic weapons, though rare today, were once common in the backwater parts of the Second Republic. Anyone can benefit from an edge in a fight, and the ability to conceal an elaborate weapon can bring a great deal of prestige in criminal circles. The simplest approach to this is installing a missile or melee weapon into a fingertip, palm, or forearm.

Centurion

Proscribed
(5 pts) Concealed
Cybertraits: 1
Firebird cost: 50, +350 for surgery
Roll: Dex + Melee
DMG: 4 (dirk)

Viper (Sword Arm)

Proscribed
(6 pts) Concealed, Fused
Cybertraits: 2
Firebird cost: 100, +350 for surgery
Roll: Dex + Melee
DMG: 5 (rapier)

Centurions and Vipers are the best examples of simple holdout cybernetic weapons. The Centurion stores a 20 cm blade in the forearm along the ulna. Upon activation, the blade springs up through the palm, where it can be grasped by a simple hilt. The blade is not actually attached to the character; it is simply stored in the cavity.

The Viper (also called a Sword Arm) is an extendible fencing weapon surgically attached to the character (hence, it cannot be disarmed). Once the telescopic blade is extended and locked in position (which takes one action), the fencer has an elegant blade at his disposal. Installing the blade back into the compartment takes one turn, although it is wise to clean it with alcohol first. Careless practitioners of this art will require daily maintenance to prevent disease and infection.

History: In the early days of the Second Republic, it is said, these devices were illegal in most urban areas. Equipping with a holdout was considered a criminal activity in itself, and as such, only desperate sorts used to living on the edge would consider this type of bod-mod. As more heroic explorers returned from their exploits after learning of the advantage of having more than one back-up weapon, society found ways to recognize and legally accommodate these citizens. Now that most body modifications are regarded as anything from suspicious to heretical, concerns over the legality of such weapons take a back seat to more immediate philosophical concerns, such as the threat of death by Inquisitional pyrotechnics.

Arm Harpoon

(5 pts) Concealed
Cybertraits: 1
Firebird cost: 50, +350 for surgery, 1 firebird per steel rod
Roll: Dex + Shoot
DMG: 3
RNG: 5/10

Jonah

(3 pts) Concealed, Skill Use
Cybertraits: 1
Firebird cost: 100, +350 for surgery
Roll: Dex + Shoot
DMG: 4
RNG: 10/20

The Arm Harpoon is similar to the Centurion save that it is used as a missile weapon. A groove in the forearm is concealed by a layer of synthflesh, and specially modified steel rods can be "loaded" into the device. The internal mechanism can, upon activation, launch the projectile through the palm of the hand up to 20 feet. Up to four of these arm harpoons can be stored in the forearm at a time.

A slightly more expensive version involves a cable attachment and an internal pulley mechanism. Citizens on water-worlds refer to these as Jonahs, since they're popular among fishermen. The internal winch is capable of pulling up to 100 kilograms. To capture a person with the Jonah, the Jonah user must first hit his target (Dexterity + Shoot) and then win a contest of his Strength + Vigor versus the target's Strength + Vigor; the Jonah user may add the victory points from his goal roll to his Strength + Vigor roll.

History: Originally a sport modification, the Arm Harpoon has since become a favorite for hunters. Throughout recent history, many top assassins have used this weapon as a trademark. Bounty hunters consider the Jonah to be a useful edge in combat as well.

Fetishes

Cyberfetishism and xenophilia were not unknown during the height of the Second Republic. Xenophiles who wanted to try to understand alien culture would pay handsomely to augment their human body with simulations of alien physiognomy.

Stimusim

Extremely Proscribed
(7 pts) +2 Perception, Cybersenses (Hypertouch), Tech Level 7
Cybertraits: 3
Firebird cost: 700 (includes the surgery)

This rather expensive version of synthflesh demonstrates the somewhat decadent and perverse impulses of cyberfetishists. Stimusim replicates the sensitivity of flesh covering reproductive organs, both human and otherwise. Layers can be placed over any part of the body, although weaving the nerve network required is a meticulous process. With this implant, almost any part of the body can be used for pleasure in the same manner as a sexual organ (although with no extra reproductive capabilities). This is particularly useful for xenophiles who, for whatever reason, seek congress with alien life forms using unusual techniques. The Church, for obvious reasons, does not care for the idea.

History: Scravers traffic in illegal magic lantern shows that display many exotic applications of this device. Detailing the innovation of such heretical pornography is beyond the scope of this book.

Ur-Eyes

(1 pt) +1 Perception, Unsightly
Cybertraits: 2
Firebird cost: 400 (includes the surgery)

Some xenophiles want to do their best to fit in with their favored alien race. Towards this end, it was a fad during the Second Republic to have one's eyes replaced with synthetic equivalents of Ur-Obun or Ur-Ukar eyes: completely black, pupil-less eyes. The Ur-Ukar, however, find this insulting, while the Ur-Obun, perplexed at the horrible social faux pas, do their best to pretend to accept it.

History: This procedure began among the spies sent to infiltrate the Ur-Ukar during the Ukar War. Sadly, not enough research was done on Ukari tribal scars and tattoos, so most spies were rooted out through misapplied markings.

Vorox Glands

TL5: (5 pts) +2 Strength, +2 Endurance, Cancerous, Organic, Unsightly
Cybertraits: 7
Firebird cost: 300 (includes surgery)
TL6: (8 pts) +2 Strength, +2 Endurance, Organic, Tech Level 6, Unsightly
Cybertraits: 6
Firebird cost: 500 (includes surgery)

Some nutcases want to make up for what nature did not provide for them by borrowing what it gave others. These freaks have synthetic glands based on Vorox physiognomy surgically implanted in them (real Vorox glands are poisonous), giving them hormone-boosted Strength and Endurance — although their sweat now emits a pungent and noticeable odor. Civilized Vorox often see this as a compliment of sorts, while feral Vorox find the stench enraging. Vorox characters cannot purchase this device. The process is not fully understood, so some low-tech versions of the surgery can be deadly to the user.

History: In the harrowing time of the Fall, many maddened marines sought an edge in combat. This was their solution. While many of these Vorox-boosted warriors won their battles, their lives after mustering out were miserable due to the ostracism they suffered.

Think Machines

Of all the technology present in the reconstructed Empire, computer technology has taken the biggest fall. Humanity once had a very optimistic view towards the use of computers and was quite willing to integrate them fully into their lives. The collapse of the Second Republic changed all that. Think machines became an obvious symbol of technology controlling the way humans live and think. Impersonal, inaccurate, and unreliable, many of these machines are considered by the Church to be heretical advocates of forbidden and dangerous knowledge (even though the Church has its own approved and sanctioned think machines).

Amazingly enough, since the second millennium the science of information management has undergone a steady decline. Whenever information is organized, there are two basic choices of how to arrange it: either for the convenience of the end-user or for the convenience of the person who organizes it. Long ago, corporations found they would make greater profits if they pandered to the needs of their customers. But as they gained more power, they were more reluctant to indulge them in their needs. By the time the bureaucracy of the Republic was in place, the byzantine systems used to manage information reflected the complexity of the organizations that programmed them.

In modern times, even basic computer literacy is hard to find. The simplest of computers are more like intellectual puzzles than providers of information. Attuning to any particular computer takes months of practice, and the enterprise becomes more of a hobby than a science before long. Only the most devoted of engineers are willing to spend the time and effort to reconstruct these systems, and only the most open-minded technophiles are eager to bring them into their daily lives. Despite this, the battle against data decay continues.

Decay and Deconstruction

There are several factors that have contributed to the slow decay of think machines. Intellectuals and scientists who have tried to recover the knowledge of the Second Republic have encountered a host of problems. In addition, any character familiar with one type of think machine may have great difficulty with a different variety.

Operating Systems: By the time humanity had spread over hundreds of worlds, any hope of establishing a universal operating system or programming language had been scattered to the solar winds. Different planets preferred different protocols in their systems, and differences of language and culture had a subtle yet steady influence. The range of languages throughout the Diaspora was only the beginning. For a sampling of modern languages and systems, see the Electronic Tower of Babel sidebar.

Friendly Viruses: Early corporations insisted on taking elaborate measures to "safeguard their intellectual properties." Some protected their systems by thoroughly encrypting them with so-called friendly viruses, which are harmless in their own machines, yet destructive to others. These diseases have had over a millennium to mutate and spread.

Dedicated Machines: Memory was as cheap as air in the Second Republic, resulting in dedicated think machines in even the simplest of technological devices. Any device could theoretically perform better with its own think machine, but in practice, this theory has made many simple Tech Level 8 devices useless. Each one has its own unusual protocols, as it has little need to converse with other think machines.

Data Decay: Memory in computers was designed to

easily last for a few centuries, but not for a millennium. A portion of the seemingly random responses of think machines are a result of systems and files decaying over time.

Lack of Understanding: The final obstacle is a some-

think machine systems.

Some think machines can link up with other machines to share data or programs. Such networking is rare in modern times, but is known, especially among the En-

Firebird cost: 700

Benefice cost: 2 pts

Learning the proper use of this laptop machine takes a little bit of work, but the rewards are worth it. Travelers venturing over long distances, either on foot or by vehicle, can input details they encounter along the way into a personalized mapper think machine. The result is a slowly growing map of the planet the travelers are exploring. Some machines require the user to take snapshots of the stars to help figure their position; others contain preprogrammed disks (standard size) with maps of many of the more popular worlds. The most sophisticated come with a light pen that can be used to detail the streets and byways of urban areas.

This machine greatly magnifies an entourage's ability to learn the geography of a new planet or town. However, the machine is not without its risks. A failed roll on a Tech + Think Machine roll can result in a poorly constructed map or a woefully lost group of travelers.

Facial Scanner

TL5

+2 to rolls involving knowledge of individuals

Roll: Tech + Think Machine

Languages: Turing or Suprema

Firebird cost: 700

Benefice cost: 3 pts

This simple hand-held device makes social intercourse much easier. It can store the images of over a thousand human and alien faces, recording not only the identity of an individual, but also notations that the user wishes to remember. For instance, if a merchant runs into a noble and his entourage, the scanner can retrieve the noble's name, his proper title, notes on his proficiencies and weaknesses at fencing, records or his last three affairs, the identity of his bodyguard, and highlighted notes on which archbishop's name one should never repeat in his presence.

The device is stored in a small satchel that is worn over the shoulder. It is equipped with a discrete lens for observing, a microphone for recording, an earphone for advising, and a rechargeable solar battery pack. Noble families have also been known to hand them down from generation to generation. In game terms, this allows the gamemaster to feed a great deal of information to players who prefer intrigue-oriented plots.

Tracker

TL5

+3 Tracking or Inquiry

Roll: Tech + Think Machine

Languages: Turing or Suprema

Firebird cost: 700

Benefice cost: 4 pts

This device was once common on many fringe worlds. Upon arrival, a bounty hunter or law enforcement official could obtain a few data files on escaped criminals and wanted renegades. The tracker would retain information

The Electronic Tower of Babel

Think machines are notorious for their difficult operating systems and programming languages. For gamemasters who wish to detail this aspect of their game (and require more languages for computer-savvy characters), here is a small sampling of them. Each of these is a separate language; programming one of them requires the skill Science (Think Machines). A character who knows this skill is considered to know one language; she will have to buy the skill separately for each extra language she wishes to learn.

Turing: This is the premiere high-tech coding language of the Empire, an artificial language constructed by the Engineers. Since only members of that guild are familiar with this language, computers that are completely reprogrammed by them can only be fully accessed by their members. Most incarnations are effectively TL6.

Constantinople: The Reeves Guild has developed its own language as well, although it is used mainly to store records and financial data. Since only a handful of these bureaucrats have the knowledge to construct data systems, they've done a shockingly poor job. Any system using Constantinople is five times more difficult than it needs to be, and only other members of the Reeves guild can decode these arcane operating systems. Consider this TL5.

Lex V.V: The Church has sanctioned and developed this cumbersome programming language. Take the crude raw data language of the First Republic, translate it into Latin, require a system of declensions for different situations, and you'll be decoding the Tetragrammaton in no time. The first version of Lex was TL4; this one is TL5.

Ië: This programming language of the Ur-Obun was developed completely independently of human society. It reflects the cultural preferences of that race, and humans find it annoying at an almost instinctual level. TL5

Link: Golems have their own various computer languages within their data matrixes. Link is a meta-language that applies to most of them. Explorers who find ancient golems have a better chance of kick-starting them if they understand it. TL5 to TL7

Suprema: This is the original form of Turing, present in many TL5 computers. Its raw data format makes it easy to translate into other languages. Add +2 to any Think Machine roll that involves Suprema. The Church is notorious for capturing these machines and modifying them to allegedly work better under Lex V.V.

Gates: This is the most commonly found TL5 language, and it is so user-friendly that it is almost impossible to use. The user must open and close a hierarchy of gates and windows, timing the operation just right so that none of them close. Filled with superfluous features, it doubles the amount of time required to perform simple operations.

on fingerprints, footprints, height and weight, scent, and distinguishing characteristics. The tracker can also be programmed in the field.

If the user can converse with an individual for at least two minutes, the machine will note and store all relevant details about that person. As a result, the user can later use Tech + Think Machine rolls as a complementary roll to any tracking rolls involving that individual.

Auto-Pilot

TL6
+3 Drive in emergency situations
Roll: Tech + Think Machine
Languages: Turing
Firebird cost: 1,000
Benefice cost: 4 pts

This is a type of "black box" available only on the black market. Possessing one will not endanger the user with the Church, but will gain the instant enmity of any representative of the Charioteers. An auto-pilot is customized for one particular vehicle, and the knowledge for programming these dedicated think machines is known only to the Charioteers guild. The machine includes basic mapping subroutines, and as such, can quickly learn the terrain of a few worlds and respond to simple verbal commands. In game terms, a character can make Tech + Think Machine roll to personalize the abilities of his high-tech transport.

Auto-pilots for starships are known as "plotters," and buying one is close to impossible. Their operation requires a series of specially made keys that are worn and guarded by Charioteers. As they are almost impossible to legally get off a ship, they are beyond the scope of this chapter.

Journal

TL6
Roll: Tech + Think Machine
Languages: Turing
Firebird cost: 1,000
Benefice cost: 3 pts

The wealthy were once able to indulge their egotism by extensively and tediously documenting all details of their lives. As a result, there are a variety of think machines that are constructed to chronicle all aspects of an expedition or all the minor details in the life of an adventurer. A journal is a multimedia think machine that records written text, visuals, sounds, scientific data, and other sensory data. The information is organized and retrievable in formats that can be edited either for academic purposes or personal pleasure. The most expensive versions of this device uses high-quality disks that are less prone to decay. The Academy Interatta is slowly building a library of journal entries to document their expeditions (or, more precisely, the expeditions that survive and return with their sanity intact).

Hierarchy

TL7
Roll: Tech + Think Machine
Languages: Turing
Firebird cost: 1,500
Benefice cost: 4 pts

A hierarchy wrist computer is intended to be the ultimate in personal data management. The user can recite any information that comes to mind and even store small segments of visual information. The trick is in retrieving the information later. If the user is curious about anything he has previously encountered, he can ask the hierarchy a few simple questions, and theoretically, the artificial intelligence within the device will organize it in a format accessible to the user. There's even a small video screen for magic lantern displays. The memory is seemingly limitless, but the tech is old enough and delicate enough to eventually lose information.

When it works, the user can roll Tech + Think Machine as a complementary roll to any knowledge-based skill roll. When it doesn't work, the same roll is required to retrieve anything at all. An annoying version of this is the Rhetorical Hierarchy, a think machine that will respond to any question with another question that may help clarify the problem.

Library

TL7
Roll: Tech + Think Machine
Languages: Turing
Firebird cost: 2,000
Benefice cost: 4 pts

In a world where scientific knowledge is rare, this is one of the most valuable of think machines. Library devices are designed to interface and download with practically any repository of data. Much of the tech relies on translators to incorporate the data into the proper format, artificial intelligence circuits to organize it, search engines to retrieve it, protocol circuits to negotiate access, and antiviral programs to stave off contamination. If everything works properly, this personal solar-powered device, about the size of a paperback book, will retrieve the information verbally specified by the user. If something goes wrong, random files within the machine will be corrupted.

Advisor

TL8
Roll: Tech + Think Machine (or Wits + Debate)
Languages: Unknown
Firebird cost: 3,000
Benefice cost: 5 pts

This is a crude artificial intelligence that can offer advice on any number of subjects. It does far more than store and retrieve information. It interprets, extrapolates, compares and contrasts, and even offers personal opinion. It is, for all intents and purposes, a sentient think machine. This is balanced by its temperamental nature, the random short circuits in its Pygmallium circuitry matrix, and its occasional psychological quirks. Each advisor develops its own personality, which can consist of anything from a fictional archetype to an officious mediator.

Unfortunately, a malfunctioning advisor can be a pain. It might say that it does not want to reveal an answer (for the user's own good, of course) or engage in frustrating demands for more information in exchange. ("*Quid pro quo, citizen. Quid pro quo!*") Like a wide variety of surviving TL8 devices, it is despised by its owners almost as much as the Inquisition. This has reduced its price considerably. With the pragmatism of the modern age, many devotees of tech state that they would rather follow their own advice.

Golems

Just as humanity has its history, golems have a crude history of their own. Piece by piece, the Engineer's Guild has begun to comprehend their evolution. Although tens of thousands of them have been destroyed by the Church over the last millennium, enough have survived to provide some knowledge of their origins. Careful research performed by the Academy Interatta has also uncovered fragments of textual and media data that chronicle events in the history of their race. The science is advancing slowly, even though those who advance it are continually at risk from Inquisitorial retribution.

Attitudes towards these constructs usually fall between two extremes. On the one hand, the Church finds their very existence blasphemous. As mockeries of the form the Pancreator chose for humankind, golems are executed by Inquisitors with great zeal. Tales of destruction wrought by these monstrous, inhuman machines have been spread far and wide by the Church. Those who protect golems, however, describe the attitudes of the Avestites and other holy men as bigoted, superstitious, or even genocidal. Experts in robotics are quick to make distinctions between the capabilities of robots, androids, and companions, and generally abhor the word "golem." The most fanatical have risked their own destruction to protect what they describe as an endangered life form.

Yet the legends and superstitions continue to spread. Golems are rare enough that the average citizen of the new empire considers them to be akin to legendary or supernatural creatures. When a golem is first encountered by the average citizen, the most common response is a curious mixture of fear and awe, and rightly so. The races of golems are dim reflections of humankind, evoking curiosity and empathy as often as they elicit fear and loathing.

Ogre

Quote: "Please clarify. Please specify. Instructions unclear. Elaborate parameters of categories 3, 7, 12, and 22."

Description: Ogres are built for heavy physical labor. They have broad shoulders, squat bodies, massive arms and

legs, and a pronounced stoop. Their faces are incapable of expression, although their straightforward demands of *"more data required"* can be rather chilling if the user is unable to fulfill them. Engineers and artisans have been known to replace their original faces with masks, including the monstrous visages of gargoyles. The very presence of an Ogre is enough to terrify the average serf or farmer.

History: This type of robot is among the crudest and most basic variety know to Engineers. A hulking, vaguely anthropomorphic creation, the Ogre has been designed to perform crude physical labor. A few surviving records reveal fragments of the controversy that accompanied their initial release. While they were able to perform dangerous tasks — such as mining, bomb disposal, and underwater construction — citizens had increasing concerns about artificial constructs replacing humans. Considering the widespread unemployment before the fall of the Second Republic, their fears were indeed justified.

Another great controversy centered around the safety of Ogres. Programming one to carry out even the simplest of commands was an arduous task at best. While some carry dedicated think machines with routines used for simple occupations, others are able to operate based on simple verbal commands. When commanding these brutes, precise wording of requests is essential. In addition, it is difficult to tell what the self-preservation parameters of an Ogre might be. Some will gladly work themselves to destruction; others will lash out at anyone who puts their survival at risk. As the saying goes, they cannot be offended, but they can be poorly instructed. Tampering with their safeguards, or incorrectly reconstructing them, can be exceedingly dangerous.

Modern Use: Ogres are now the most commonly found variety of golems. Engineers have found this model to be one of the easiest to reconstruct. The basic design is straightforward enough that apprentice Engineers usually study this model first. Demented or insane scientists have made shocking modifications to their original form.
TL5

Body: Strength 13 (+3 STR bonus), Dexterity 6, Endurance 10
Mind: Wits 2, Perception 2, Tech 2

Frankenstein's Monster Lives On...

Some of the most innovative Engineers have attempted to reconstruct Ogre bodies with greater and more sophisticated intelligence. Reconstructing a TL 5 ogre and integrating it with TL 6 or 7 intelligence has tragic results. The most common basic emotions in these Frankenstein models are rage, hatred, envy, and contempt. There are several theories as to why this occurs, but there is no commonly accepted explanation. Some of these monsters have survived their creators, hiding a developed intelligence and seething contempt behind the facade of a hulking brute.

Natural Skills: Dodge 3, Fight 5, Impress 7, Melee 3, Shoot 1, Vigor 5
Learned Skills: One or two learned skills at level 3
Blessings/Curses: Monstrous (-3 Charm)
Benefices/Afflictions: Stigma (fearsome)
Cybertraits: None
Weapons: +1 Fist DMG (metal hands)
Armor: 5d + 5
Vitality: -8/-6/-2/0/0/0/0/0/0/0/0/0/0/0

Askari

Quote: "Submit. Divest yourself of armature. Submit. You have 10 seconds to throw down your weapons and submit..."

Description: Although Askari have the appearance of trained athletes, very little of their forms are made of flesh. The original models were designed with emotionless metal faces. After the Fall, efforts were made to hide their true nature with layers of synthflesh, military uniforms, and military secrecy. No planet, however, would be foolish enough to obtain more than one.

History: The progression was a natural one: once military leaders heard stories of the rampages of deviant Ogres, research into the use of robots as killing machines was accelerated. Corporations desperately tried to salvage the public image of these machines, vainly hoping that expensive models might be adapted for use in the home, but far more profit was to be found in military ventures. The Askari was the first sophisticated model manufactured to serve on hunting grounds, in military bases, and on battlefields.

The basic Askari is programmed to do one thing — it is designed to kill and kill again. The most sophisticated elements of its crude intelligence allow it to distinguish between friends and foes. As a predator, it can also be programmed to recognize different species of animals, track them, and slaughter them. As the perfect soldier, it carries out its orders to the best of its abilities. As they unusually rare, they have become even more valuable.

These golems have one overwhelming flaw, however. Over the centuries, they have developed a psychopathic hatred of their own kind. Long ago, it was possible to form a squadron of four or five, but after a millennia of data decay, any two Askaris will attempt to destroy each other at first sight. Last year, the Academy Interatta documented an unprecedented discovery of three Askari on the same lost world. Unfortunately, the three golems began stalking each other moments after resurrection. They then slaughtered half of the field research team in the process.

Modern Use: Planetary tyrants pay dearly to finance the resurrection of a salvaged Askari. Although the process is a dangerous one, Askaris will act with unquestioning obedience and loyalty. The Askari is the quintessential palace guard, the ultimate bodyguard, and without a doubt, the epitome of the phrase "killing machine." They reflect humankind's basest instincts towards war.

TL6

Body: Strength 10 (+2 STR bonus), Dexterity 9, Endurance 11

Mind: Wits 5, Perception 7, Tech 4

Natural Skills: Dodge 8, Fight 9, Impress 9, Melee 9, Shoot 10, Vigor 12

Learned Skills: Drive 4, Search 5, Tracking 7, Survival 5, Torture 2, Warfare (Tactics) 3

Blessings/Curses: Ambidextrous (no penalty for using off-hand weapon)

Benefices/Afflictions: Vendetta

Cybertraits: Shoulder Mount

Weapons: Blaster

Armor: 4d + 4

Vitality: -8/ -6/ -2/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Menial Android or Exotic Menial

Quote: "What is your pleasure, sir?"

Description: Menial androids are made to appear physically perfect, and some are trained to exhibit peculiar mannerisms to endear them to their owners. As an object, a menial might have been constructed to appear as a coquettish French maid, a captured alien slave, or any other personality the owner found desirous. Exotic menials can take on any appearance. Particularly freakish menials have a very high entertainment value at parties.

History: Disastrous and violent events in the early history of robotics made citizens of the Second Republic extremely wary of the prospect of bringing serving robots into their homes. However, the ancestors of the first planetary zaibatsus have an old saying: where there's a profit, there's a way. The menial android is an eminently polite and excessively obedient creature. Academicians of the Interatta refer to this specimen as the first true android.

After excruciating safety tests, menial androids were welcomed into homes across the Republic. Their increased intelligence did far more than enable them to take on tasks like housework, butlering, secretarial work, and janitorial tasks. It also imbued the constructs with an under-standing of basic etiquette. How unfortunate that the bitter legacy that has stalked the history of golems has preyed upon this species as well.

The first androids made for a perfect slave race. Each one was programmed and trained to feel remorse when its tasks were not performed to the satisfaction of its owners. It also possessed remarkable simulations of loyalty, love, and servitude. Stories of abuse were carefully repressed by the corporations that made menials available. Radical civil rights advocates argued that this slave race was the recipient of physical abuse, programmed abuse, and even sexual abuse.

In response to this, more advanced units were constructed to appear decidedly non-human. Exotic menials can take on almost any appearance. Wealthy nobles have been known to own walking statues, faerie creatures, three-foot-high three-legged cylinders (we'd call them "Artoo" units...), and masked giants. Exotic menials can be intimidating, but their alien identities tend to make them more psychologically stable than humanoid androids.

Modern Use: In modern times, sculpting of synthflesh, along with ingenious and laborious programming, can adjust the personality of a menial. If golems are reflections of humans' attitudes towards each other, then menials are expressions of their dehumanizing demands and fantasies. Menials in a wealthy home can act out any social order from drawing-room dramas to freak shows. TL6

Body: Strength 4, Dexterity 7, Endurance 5

Mind: Wits 5, Perception 5, Tech 5

Natural Skills: Dodge 3, Fight 3, Impress 2, Melee 2, Vigor 3

Learned Skills: Drive 5, Performance 3, Acting 3, Artisan (Housework) 6, Etiquette 5

Blessings/Curses: Most androids are Angelic (+3 Charm); most exotics are Handsome (+1 Charm) or Homely (-1 Charm); both varieties of menials are Gracious (+2 Extrovert to guests)

Benefices/Afflictions: Obligation, Stigma (mild or severe)

Cybertraits: None

Weapons: Absolutely none

Armor: 2d + 2

Vitality: -8/ -6/ -2/ 0/ 0/ 0/ 0/ 0

Companion or Scout

Quote: "Sir, I have found a particularly unusual specimen of flora, approximating the genus *Alleus alleficarum*. I find it reminiscent of a poem by Elspeth van der Moore. Shall I begin a chemical analysis, or would you like a recital of the poem?"

Description: Companions are quite beautiful, yet are tinged with sadness. Most are designed as living sculpture and have pleasing features, making them seem like ambassadors from the past. Scouts are highly professional and have a very military bearing, despite their programmed pacifism. They are often found in their original uniforms, but they are willing to enter the employ of modern authoritarian organizations.
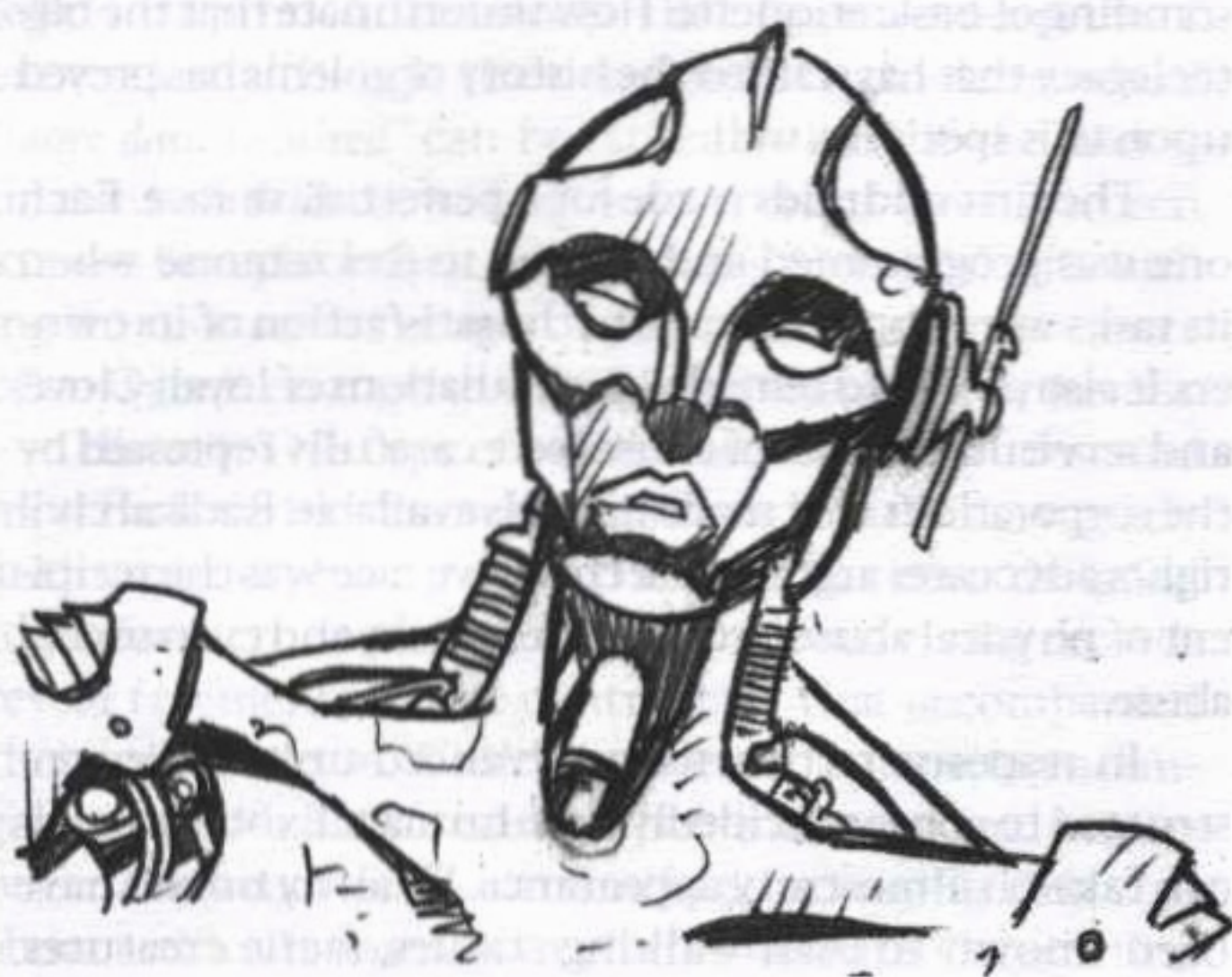
History: By the time humanity had progressed technologically enough to manufacture androids with a wide range of emotions, some planets had evolved laws to deal with the rights of artificial humans. Still, the most sophisticated constructs continued to serve humanity as they were programmed, and if they felt remorse or pain at their treatment, perhaps they were not capable of showing it. The least capable of them served as companions to those who could afford them. The most capable served as highly valued members of spacefaring crews and were renowned for their abilities as scouts.

Modern Use: Less than a 100 golems of this variety have been resurrected from their centuries-old slumber. Golems from this Tech Level have highly sophisticated intelligence. In fact, they rival most think machines of this era, as they have the most user-friendly interface imaginable. It is unfortunate that so much of their memory has decayed over time. The term "resurrection" came into use after the first example of this type of golem was discovered. Their past is so different from their present that they must begin another life. Upon resurrection, most of their memory and their original personality is lost.

Companions are used to being treated with some degree of respect and react with very human emotional responses. With outstanding memories, they serve as repositories of data. The few modern golems of this variety who have survived their long slumber after the Fall of the Second Republic still have scattered memories of the humans they attended to. However, the emotional trauma of losing their former lives is intense, and they never quite fit in with sixth millennial culture.

Scouts are inquisitive, yet lack independence. The adjustment to modern times is a great shock to them, as they once lived solely to expand humanity's understanding of the universe. Now most of that knowledge has been lost. Their memories decay even more rapidly than those of companions. A few are even incapable of carrying

memories from week to week. Despite this, they retain their scientific skills and are quite adept at carrying out the scientific grunt work a party of adventurers requires. TL7

Body: Strength 7 (+1 STR bonus), Dexterity 7, Endurance 7
Mind: Wits 6, Perception 6, Tech 6
Natural Skills: Dodge 6, Fight 5, Impress 3, Melee 5, Shoot 5, Vigor 5
Learned Skills: Drive 5, Empathy 3, Read Urthish 6, Remedy 3, Redemption (Mech, High-Tech) 5, Science (any three specialties) 5, Social (Acting) 5, Science (Think Machine: Turing, Suprema) 5, Spacesuit 3, Think Machine 5
Blessings/Curses: Scouts are Disciplined (+2 Calm in combat situations); companions are Compassionate (+2 Passion when helping others); most are Pacifists (+2 Calm when confronted with direct violence, cannot intentionally kill a sentient creature)
Benefices/Afflictions: Obligation, Dependent
Cybertraits: None
Weapons: None
Armor: 3d+3
Vitality: -8/ -6/ -2/0/0/0/0/0/0/0

Mediator

Quote: "File #32 extracted, accession number AG7248. Detailed account of First Contact with Vau Race. File begins... file begins... file begins... *Ring around the rosie, pocket full of posies...*"

Description: The Mediators appear as elderly humans with delicate features and long flowing robes. Of the two known Mediators, Professor Odysseus is a senile male; the renegade Mediator is an imperious female.

History: Only two such specimens of this variety have survived the Inquisition. They were constructed at the height of the Second Republic and designed to last for a thousand years. It's a damn shame their warranty has expired. Mediators were designed as consummate information brokers and are equipped to interface with any variety of think machine. The remarkably advanced and incredibly sophisticated nature of its Pygmallium intelligence matrix is matched only by its fragility and susceptibility to modern strains of computer virus. As they are completely helpless before these modern innovations; the chances of getting information from one of these machines is almost random.

Modern Use: As one of the most advanced types of golem known to the Empire, it is almost useless. The first Mediator uncovered, Professor Odysseus (see below) is one of the few surviving examples of TL8 robotics, a recent addition to the world of Leagueheim, and one of the most expensive white elephants on that planet. The second reconstructed its mental matrix long enough to steal an Imperial space craft and enter a jumpgate, and it has been lost ever since.

Professor Odysseus

Quote: "Of course I remember the halcyon days of the Second Republic. I was brought to consciousness during the presidency of Vladimir — no, wait... Vladimir was the first Emperor. The president was... uhm... er... What was the question?"

Description: Professor Odysseus's appearance is similar to that of a companion or scout, but his bearing is of a more professorial and academic disposition. Physiologically, if one may use the word, his age appears to be in his mid-thirties, although he has memories of being a librarian android and technical consultant long ago. For no discernible reason, he smokes a pipe. It can give him no pleasure, but his companions at the Academy Interatta find it appropriate.

History: Today, in the slowly advancing world of the fading suns, most resurrected golems are a mockery of what they once were. Treated as slaves, grunts, and expendable citizens in ancient times, they have been resurrected to serve once again. If the Pancreator made man in His image, then golems are a reflection of many of humanity's baser traits: its brutal tendency towards war, its callous tendencies to enslave the weak and exploit the disenfranchised, and its hubristic desire to learn more than humans can understand. Perhaps the Inquisition is justified in expunging all evidence of these atrocities.

In the midst of this Inquisition, there are scientists who demand that golems have a right to exist. Among their strongest arguments are a few advanced golems that have survived and prospered. For instance, there are a few outstanding golems who are sophisticated enough to have petitioned for citizenship within the newly reconstructed empire. They defy categorization, demanding instead that they be called by their chosen names. "Professor" Odysseus is one such example.

He has chosen to erase most of his memory, forsaking the past to understand the present. Portions of his mental matrix are shut down from time to time, as he uses them to analyze the viruses trapped inside him. Odysseus is insistent that he be treated as any other citizen, and he demands the right to travel freely throughout the Empire. The slavery to which golems are subjected appalls him, yet he remains the foremost expert on their design. For this reason, he has an honorary title of "Professor" within the Engineers, and he consults with them frequently. Odysseus is one of the last hopes that his race will not only be resurrected, but *redeemed*.

Modern Use: Odysseus frequently travels on expeditions for the Academy Interatta, gathering data for them as he attempts to reconstruct his own. His memory has become faulty over time, and he fights an ongoing battle with entropy. Several of his co-workers have insisted that he is almost human; he responds by stating that he is not human. He takes pride in what he is, and he firmly declares that he is, in fact, a golem.

Unique, TL8

Body: Strength 8 (+1 STR bonus), Dexterity 6, Endurance 8

Mind: Wits 6, Perception 8, Tech 8

Natural Skills: Charm 4, Dodge 9, Fight 4, Impress 5, Melee 4, Observe 8, Shoot 4, Sneak 6, Vigor 7

Learned Skills: Academia 8, Bureaucracy 6, Empathy 2, Read Urthish 7, Redemption (High-Tech, Volt, Mech) 6, Redemption (Golem) 8, Science (Cybernetics) 5, Science (Engineering) 8, Science (Think Machine: Turing, Suprema, Link) 7, Search 6, Social (Leadership 4, Debate 7), Think Machine 6

Blessings/Curses: Grease Monkey (+2 with all Tech Redemption skills)/ Clueless (-2 Per to notice social cues)

Benefices/Afflictions: Cloistered, Status (Professor), Passage Contracts

Cybertraits: None

Weapons: None

Armor: 1d + 1

Vitality: -8/ -6/ -2/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Chapter Four: Starships

Explanation Of Traits

The following traits apply to all spacecraft, from small planetary shuttles to huge jump-capable carriers and destroyers.

Name: The common name for the craft.

Grade: This determines whether if the ship may enter an atmosphere. Landers are ships that may enter atmospheres and land on planets (preferably at a spaceport) without difficulty. Atmospheric ships may enter upper atmospheres only; they cannot land on planets and must either dock in orbit or at a spacestation. Void ships may not enter an atmosphere in any way; they cannot obtain orbit and must dock at a spacestation.

Builder: The guild or family that builds the majority of the craft.

Tech Level: Tech Level of the craft. This represents the Tech Level of the design, not necessarily every piece of tech included in the ship. For instance, weapons and sensors may be higher tech than the ship itself.

Length: Length of the ship from tip to stern along the keel.

Width: Width of the ship at its widest point.

Crew: Minimum crew needed to fully operate the ship.

Passengers: Number of passengers the ship was designed to comfortably allow.

Cargo (Internal): Cargo contained inside the ship, measured in metric tons.

Cargo (External): Cargo attached to the hull or cargo struts (metric tons). See Clamp, Magnetic and Fusion Bonding, below.

Speed: The maximum speed the ship can attain and the time to takes to reach the average jumpgate (15 billion kilometers away, or 100 astronomical units), usually measured in percentages of lightspeed (for jumpships) or mach (for non-jump ships).

Jumps: This is the number of trips a ship can make to and from a jumpgate before it needs to refuel (about 200 AU each jump). Most ships do not have fusion generators; they store energy but cannot create it. Recharging a ship's fusion stores requires a hook-up to a more powerful, sta-

tionary fusion generator, found in every starport and spacestation. The average cost is 300 firebirds per jump.

Those ships that do have generators usually have a higher number of jumps they can make, but even these eventually run down as more energy is used than is generated. There is a certain amount of fusion the generator requires to be able to create more energy; if this amount is used up, the generator will shut down and the ship will run only on its fusion stores (halve the number of jumps). Engineers can usually regulate a ship's energy needs well enough to not worry about losing power, but a surprise space assault will greatly tax a ship's energy use.

Ships which do not have jump drives will have a range (in AU) listed instead, representing how far the ship can travel before it is out of fuel.

Supplies: How much food, water, air, etc., the ship normally contains. Most ports have merchants who deal specifically in reprovisioning ship stores. Costs vary with crew size and amount of time the stores are intended to last. Figure one firebird per passenger (including crewmembers) per week. Certain passengers may cost more, especially if they insist on their own staterooms and caviar with every meal.

Sensors: Rated on a scale of 1-10 (representing astronomical units, or 150 million kilometers each) and by type. See Sensors, below.

Weaponry: This is the standard or most common armament found on the craft. Mounts can fire in one direction only, while turrets allow 360° of fire.

Maneuvering: A bonus or penalty applied to the pilot's Drive Spacecraft skill.

Armor: The armor rating of the ship's hull.

Shield: Type of shield, if any. See Energy Shields, below.

Vitality: The amount of damage a ship can take before it is destroyed. The subtractions suffered at low Vitality affect maneuverability and most rolls (piloting and engineering). The subtraction is also applied to the ship's speed. Unlike characters, ships do not heal by themselves; any Vitality damage must be repaired by a technician. The costs and times for repairing hull damage are listed with each ship (see Common Modifications).

Cost: The first cost listed is in Benefice points (the amount a character or group of characters must pay to begin the game with the craft); the second is in firebirds.

Description: This is a general description of the craft and its common uses.

History: Interesting historical facts about the craft.

Common Modifications: This lists the most common modifications available for the craft. Time = the amount of time it takes before a roll can be made (usually Tech + a Redemption skill); Points = the total amount of victory points required on a sustained roll for installation; Max = the total amount of that modification that can be made to the craft; Cost = cost in firebirds.

Sensors

Sensors require little attention except when trying to discover details, such as whether that ship exiting the jumpgate is a frigate or a scout ship, and if it's a Church or League ship. This fine observation requires a Tech + Science (Sensors) roll. However, subtract one from the roll for each AU (astronomical unit) distant the ship is. Sensors cannot detect anything past their ranges (one AU per rating). Ships have one or more of the following sensor arrays:

Radar (TL4): The most common type of sensors, using active radio wave transmissions. Radar cannot be rated higher than 5 (planetary signals and space debris interfere with the range). Cost is 500 firebirds plus 200 per rating.

Laser radar (TL5): Light-based radar, sending active light transmissions. While more information can be conveyed than with radar, it can be blocked or confused by debris, gas clouds, or other obstructions. Cannot be rated higher than 5. Cost is 750 firebirds plus 200 per rating.

Densometer (TL5): Measures the density of surrounding space. Cannot be rated higher than 5. Cost is 750 firebirds plus 200 per rating.

Infrared (TL5): Reads the infrared spectrum for heat sources such as spaceship engines. Cannot be rated higher than 7. Cost is 1000 firebirds plus 200 per rating.

EMS (TL6): Sensors which read a wide array of the electromagnetic spectrum. Cannot be rated higher than 8. Cost is 3000 firebirds plus 200 per rating.

Neutrinos (TL7): The standard sensor array of the Second Republic, using neutrino beam transmissions. Rating can go up to 10. Cost is 5000 firebirds plus 500 per rating.

Psi sensors (TL8): Extremely rare, these psionic devices scan space for neural activity. They can be rated up to 10, but can only read people, not ships. These sensors do not require psychics to operate them. These are used as backup sensors only; a ship with Psi sensors alone would not be able to read large, lifeless space debris. Cost is 30,000 firebirds plus 200 per rating.

Probes (TL5+): Robotic probes were somewhat common during the Diaspora and Second Republic, but the post-Fall Church's hate of golems and their ilk has made them extremely uncommon. Nonetheless, some ships can

Spacecraft Weapons Chart

Weapon	Roll	Goal	Dmg	Shots	Rate	Cost
Antipersonnel Blaster†	Dx+Warfare (Gunnery)	––	9	N/A	2	1000
Anti-armor Med Blaster*	Dx+Warfare (Gunnery)	+1	6	N/A	1	1300
Lt Laser**	Dx+Warfare (Gunnery)	+1	3	N/A	2	1000
Med Laser**	Dx+Warfare (Gunnery)	+1	4	N/A	2	1500
Hvy Laser**	Dx+Warfare (Gunnery)	+1	6	N/A	2	2100
Lt Blaster***	Dx+Warfare (Gunnery)	+1	5	N/A	1	2100
Med Blaster***	Dx+Warfare (Gunnery)	+1	6	N/A	1	3000
Hvy Blaster***	Dx+Warfare (Gunnery)	––	7	N/A	1	4500
Gatling Blaster***	Dx+Warfare (Gunnery)	––	5	N/A	3(A)	5000
Lt Meson Cannon***	Dx+Warfare (Gunnery)	-1	12	N/A	1 per 2	14000
Hvy Meson Cannon***	Dx+Warfare (Gunnery)	-2	20	N/A	1 per 3	30000
Gatling Meson Cannon	Dx+Warfare (Gunnery)	-1	10	N/A	1(A)	40000
Rocket Pod	Dx+Warfare (Gunnery)	––	5	24	3(A)	1500 (20)
Missile Rack	Dx+Warfare (Gunnery)	+2	8	12	3(A)	2000 (20)
Torpedo Launcher****	Dx+Warfare (Gunnery)	-2	15	2	1	4000 (40)
Plasma Bombs ††	Dx+Warfare (Gunnery)	-4	20	8	2	1000 (10)

* Armor is halved when defending against this weapon.

** Lasers suffer -1 DMG in dust clouds and -3 DMG in a nebula

*** Blasters and Meson Cannons leak through shields on a damage roll of 1, 2, 3, 4, or 5.

**** Torpedoes may be shot down by any weapon except a torpedo, missile or rocket; at least 3 victory points on Dx + Warfare (Gunnery) roll must be scored. Torpedoes each have 2 Vitality and 1 Armor.

† This is a character-scale gun (damage is not multiplied by 3 when used against characters)

†† Ground targets only

Note: Costs are in firebirds. Costs in parenthesis are for a single shot. All weapons except Torpedo Launchers and Meson Cannons can be mounted on a turret, allowing 360° fire. This adds 20% to the cost of the weapon.

be found with a complement of long or short range probes, designed to be shot forth at high speed to a particular destination (such as a planet's atmosphere) and then relay information back from that point. Some probes can even return, but most are one-way. The usual range is 10 – 20 AU. The sophistication and durability of a probe depends on its Tech Level and manufacture. These robot helpers are rare; it's hard to find a one-way probe for less than 50 firebirds. Triple or quadruple that for a returnable probe. Most probes have Vitality 1, armor 1.

Buoy (TL5+): Stationary buoys can be placed at various points in a solar system to quickly relay information to a ship designed to receive its coded message. Since this form of transmission is one way (from buoy to ship), it is meant to travel farther than most two-way sensors. The usually range is 20 AU, but a chain of buoys can be linked to send information farther. Such "guard posts" (most buoys scan within a 3 AU region) are favored by those noble houses who can afford to lace their planetary systems with them (they are often destroyed by malcontents, pirates or rivals), and are especially favored by pirate hunting Inquisitors. The average buoy costs 300 firebirds. Most buoys have Vitality 2, armor 2.

Emergency Signals: All ships can emit an emergency signal, an interplanetary call for help. This signal gives little information beyond the location of the troubled ship. The range is usually 20 AU.

Note: Such science fiction standbys as life scanners are unknown in the Known Worlds, although Symbiots are rumored to be able to detect life at long ranges. In addition, very little about a planet's atmosphere can be detected without a sample of that atmosphere — which usually requires entering the atmosphere.

Weaponry

The Starship Weapons Chart gives the most commonly available ship-mounted weapons in the Known Worlds, though meson weapons and torpedoes are normally only available to the various military groups of the three main powers — no one wants an unaligned meson cannon running amok. These weapons can be purchased through the various sources, usually a League merchant or noble-house backed weaponsmith, but there are many independent vendors on the black market.

Energy Shields

The Ambrim family, under the patronage of House Hawkwood, is one of the few manufacturers of commercially available spaceship energy shield generators in the Known Worlds. If it's not an Ambrim, it's military surplus or stolen. Most ships that can support shields have them, but operating a shield takes a lot of energy. Captains who value a shield more than speed or weaponry strip some parts of their ships to make the energy necessary to fuel a shield.

Spaceship Combat

Combat between spaceships is handled, for the most part, like combat between characters, only on a larger scale.

Ships cannot engage in combat at anywhere near their maximum speeds, as they would be traveling far too fast to ever target another ship. For this reason, most engagements take place near the planet of launch (before the ship has accelerated enough to avoid assault) or at the destination (as the ship slows down to maneuver its landing or entry into a jumpgate). Certain ships have tractor beams which can force a target to slow down enough to engage it (see Tractor Beams, below).

Pursuit

Pursuit can only take place between ships which can detect each other with their sensors. Pursuit is treated as a sustained action. Each pilot rolls Wits + Drive Spacecraft and must accumulate a number of victory points in a series of sustained rolls. Whoever collects the required victory points first is the winner: the pursuer closes on his prey and combat begins, or the prey outdistances his pursuer, leaving sensor range. The amount of victory points depends on the situation; the usual amount is 10. As a general rule, the number should be no less than the pursuing ship's Sensors rating.

The amount of victory points can be adjusted by various factors: if the pursuer is close to the prey when the chase begins, he may have to accumulate less points than his prey; a chase through an asteroid field may increase the amount the pursuer must roll (in addition to requiring Dexterity + Drive Spacecraft rolls to avoid colliding with an asteroid); and a run through a nebula may interfere with both ships' sensors, dramatically decreasing the amount the prey needs to escape. In addition, the gamemaster may want to award faster ships a bonus to each roll they make.

A Good Engineer: Sometimes, a ship needs to give all she's got to escape a battle or to start one. The ship's engineer can temporarily tweak his engines to give his ship the extra oomph it needs. Each turn, roll Tech + High Tech Redemption and add the victory points to the ship's pursuit victory point total (see Pursuit). However, this is dangerous, for it strains the engines past their safe operating limit. If a critical failure is rolled, the engines shut down, along with weapon systems and shields. The ship immediately begins to drift. The engines will remain down for at least one hour.

Combat

Once a ship has closed within fighting range of its prey (less than one AU, or astronomical unit), it may fire its guns. If the other ship's engines have been disabled or shut down, the attacker can attempt to board the ship. There are a number of actions that can be taken by pilots and crewmen:

Dodge: A pilot can maneuver his ship to avoid enemy fire. Roll Dexterity + Drive Spacecraft and contest the number of successes against all goal rolls targeted against the ship, just as with a hand-to-hand combat Dodge. This takes one action to perform; if the pilots performs other actions in the same turn (such as maneuvering around that asteroid), he suffers the multiple action penalties for all his actions that turn.

Firing Guns: A pilot or gunner can fire one of the ship's guns. Roll Dexterity + Warfare (Gunnery) and add the victory dice to the weapon's damage. This takes one action to perform; if the gunner performs other actions in the same turn, she suffers the multiple action penalties for all her actions that turn.

Characters and Scale

Ships have Vitality, armor, shields and weapons. However, these traits are on a much larger scale than similar character traits. In most instances, a character's weapon will be incapable of harming a spacecraft, or do so little damage as not to matter. When dealing with character scale situations (characters at the spaceport shooting a docked ship with their blasters), figure that each point of ship Vitality or armor is worth five points of character damage (this is not necessarily true inside the ship). In addition, starship weapons do their normal damage x5 when directed against characters. For instance, a light laser cannon, which normally does 3 dice of damage, will do 15 dice against characters (plus any victory dice gained by the gun operator).

Shipboard energy shields operate similar to personal shields, except that they do not have minimum thresholds — they absorb all damage that hits them up to their protection (upper threshold) ratings.

Shield	Rating	Firebird cost
Vambrace	5	5000
Standard	10	10,000
Assault	15	15,000
Battle	20	20,000

Shields are not dependable against all attacks. When a ship suffers more attacks in one turn than its protection rating, the shield may burn out. Roll a d20; on a roll of 13 or less, the shield continues to work. If the roll fails, the shield activates this turn but will burn out afterwards. On a critical failure, the shield burns out and does not activate this turn. Once a shield burns out, it must be repaired by technicians, a task requiring 12 victory points on a sustained roll. One roll can be made per turn.

Frictionless Hull Coating

Some ship owners who cannot afford shields or heavy armor have been known to coat their hulls with frictionless gel. This aids a ship immensely against meteors and other space debris. It also adds +2d to the ship's armor against physical attacks, and +1d against energy attacks. The ship also handles much better in an atmosphere, negating most penalties for high winds. This treatment is very rare, expensive, and — in most people's opinions — not worth the cost. It costs 1000 firebirds for enough gel to coat one side of the ship (usually, only the fore is coated). This gel must be repainted after about two weeks of journeying through space, as it has a tendency to lose its bonding after long exposure to a vacuum.

Think Machines

Each spacecraft requires a think machine, from the minor computer of a Runt to the more sophisticated, multitasking machines of a Kylanthra frigate. The ships listed in this chapter are assumed to have think machines capable of handling all their standard requirements; getting them to do anymore than that, however, is problematical. Below is a list of some extra programs available. Any of the think machine tasks listed in Chapter Four are available as starship programs also.

Gunnery: There are a variety of think machine programs which can aid under-manned ships, taking over gunnery positions. These automatic tracking systems usually have a goal of 7, making them worse than most living gunners but better than an empty turret. AI gunners usually have more dice, but are proscribed by the Church. The cost is 500 firebirds per gun.

Autopilot: The ship can pilot itself. It must be given a destination to which it will plot the best course. Giving it extra parameters helps (i.e., you need to get there faster rather than safer). Some autopilots have emergency landing routines whereby they will choose the destination themselves (the closest, safest landing or orbit). The cost is

1000 for either version, or 1500 for both.

Combat pilot: A more advanced autopilot, this program can take over tight maneuvering. It is best for defensive maneuvers, but performs relatively well in offensive situations also. Most programs have a goal of 7 for dodging enemy fire.

Mapping: The computer can map and remember multiple star systems, storing many details on these systems. It costs about 2000 firebirds for a mapping program and about 200 firebirds per preprogrammed system. Proscribed routes (for worlds such as Stigmata or Vau) are more expensive, and hard to find.

Data Analysis: The computer can analyze various situations. It must have the requisite skill program (usually a Lore), which costs anywhere from 50 to 300 firebirds. Most data analysis machines have a goal of 7. The usefulness of the analysis depends on the number of successes rolled.

Jumproutes: The computer has preprogrammed jumproutes within its memory. Beware, however, for the Charioteers consider this illegal. They will destroy such memory and usually the machine with it, if not the ship's crew also. While it is harder to steal jumproute data than a jumpkey, it takes longer to access the data (see the **Fading Suns** rulebook). Most routes are available on the black market. Costs vary with the route, but the most common (Byzantium Secundus to Criticorum) still costs 2500 firebirds.

Jumpkeys

Jumpkeys are used to link a jumpgate to another particular jumpgate, to allow interstellar travel. Without these keys the jumpgates would be pretty useless. While many jumpkeys are remnants of the Second Republic, with some even dating back to the First Republic, jumpkeys are one of the old technologies that can still be produced today. Modern jumpkeys are a bit larger and more block-like than the older versions are, but that's to be expected.

Most jumpkeys connect a particular jumpgate to a particular jumpgate, usually to a jumpgate in an adjacent system, such as the jump between Byzantium Secundus and Tethys. The truly valuable jumpkeys have a series of jump coordinates in them, such as a full trade route between three or more worlds.

When a ship approaches a jumpgate, the jumpkey to the desired location is inserted into a computer panel, which relays the information to the jumpgate in a series of light transmissions. If the coordinates are correct, the gate opens. The singular nature of each jumpkey makes them valued commodities. The measure of a Charioteer is often the number of jumpkeys she carries. Jumpkeys are a favorite booty of pirates, always seeking new jumproads to plunder.

Only the Charioteers know how to make these keys, and they guard the tech fanatically. A "Chauki stride" in the vacuum of space (i.e., being thrown out of an airlock) is the usual fate of those who try to bootleg jumpkeys, threatening Charioteer hegemony over the jumproads.

The cost of a jumpkey varies radically, since they are not for sale. They are given to Charioteers who earn them by working their way up the ranks of the guild. Assume that a Charioteer character has one jumpkey for each rank he attains past the first (he gets his first jumpkey when he becomes a Chief). These keys hold one jump coordinate each (such as Byzantium Secundus to Pyre). A character may spend Benefice points to buy more keys or improve their existing keys; assume 2 points per jump (thus, a key with three planets, such as Holy Terra/ Sutek/ Byzantium Secundus, would cost 6 points).

Nonetheless, the black market does support a trade in these goods, whether stolen or bootlegged. It would be a lucky day to find a common, single route key (Byzantium Secundus to Criticorum) for only 3,000 firebirds. Jumpkey traders can smell a client's desperation from leagues away, and will jack their prices up accordingly. There is obviously no guarantee that a black market key will work or even get the buyer to the promised destination.

Artificial Gravity

Using a variation of stolen Vau repulsor technology, artificial gravity is a standard feature in most ships. This does not mean that it works on all ships though, as the crews of poorly maintained ships often find themselves floating about after a severe shock to the ship. Artificial gravity is normally maintained by repulsor pads in the ceiling of the ships, exerting a constant downward pressure on the passengers, just enough to mimic a comfortable level of gravity. This force can be altered for the preference of different races.

Horror stories abound about crews who were crushed by gravity systems. However, this is not usually possible, as most systems are normally designed to go no higher than 2Gs. Some captains modify their ships, allowing them to raise gravity levels in some sections in retaliation for a boarding action, but these can malfunction and slay the ship's crew. Some ancient ships have no artificial gravity and instead use forces of acceleration on long voyages to simulate gravity. In combat situations, these ships become very dangerous as quick maneuvers throw floating crew members into nearby walls.

Tractor Beams

Certain large ships still bear a wonder of Second Republic technology: a tractor beam. These repulsor rays can latch onto another ship and force that ship to slow its speed to match that of the beam emitter or halt the ship entirely (usually for a boarding action). The beam's action is not immediate; its prey is slowly brought down. Each turn, the beam subtracts from its prey's speed until either the desired speed is attained or the ship comes to a halt, held steady by the beam's powerful field. Most beams subtract 1% of light speed a turn (still enough to tax the target's artificial gravity generators and throw the crew about when the beam first hits their ship).

The known tractor beams are Second Republic relics, and few of them can fit into a ship smaller than a frigate. Most beams were destroyed during the Fall of the Second Republic. The Emperor Wars left the Emperor and the Church with the lion's share of the surviving snares. They are favorites of the Inquisition.

Clamp, Magnetic and Fusion Bonding

When humans first took to the spaceways, they hauled goods in the interior of their crafts to keep them safe. As armor plating and radiation shielding improved, cargo began to be carried on the exterior of ships, clamped down by powerful hydraulic arms and locking pins. As technology steadily improved during the Diaspora and Second Republic, alternate methods arose which allowed cargo to be picked up or dropped off more quickly. The first innovation was magnetism (TL5). Electromagnets form the surface of most cargo struts with magnetic bonding, using their massive force to attach metal crates to the struts. This works well with most cargos, but cargos containing very sensitive electronics are often disturbed by the massive magnetic fields produced.

The solution to this problem was fusion bonding (TL6). Like the molecular bonds of a molecule, this relied

on the sharing of electrons between the cargo strut and the cargo container. This process took hours when first invented, but eventually allowed cargo to be attached in less than five minutes with fewer workers. Fusion bonding is much rarer than magnetic bonding, since few can maintain or manufacture the technology today.

Escape Pods

Well maintained ships usually have a complement of escape pods for a full crew and passenger load, but with less well maintained ships this is not always the case. There are few manufacturers of life boats left in the Known Worlds, leaving many ships in the predicament of having less escape pods than needed, or none at all. Most military ships have a full complement, as do most noble ships, but it is not uncommon for a freighter to only have enough room in its escape pods for half its crew. Some crews have taken to bolting landers to their ships to serve as life boats instead. This seldom works out, as most crews do not have time to power up the lander before the mother ship meets an untimely demise that takes the lander with it.

Escape pods are usually built in five man increments, ranging from five-man escape pods to 20-man escape pods. These pods usually hold enough food for a full passenger load for two weeks, in addition to tents, a small handgun and an emergency beacon. This beacon has a range of about 20 AU and activates as soon as the escape pod is jettisoned from the mother ship. Most escape pods travel at 5% of the speed of light. Escape pods are considered to have a Vitality of 2 and a Maneuverability of -4. They usually have a range of about 10 AU. Escape pods cannot be fitted with a jumpdrive.

An escape pod can be jettisoned within one combat turn after everyone has boarded. The escape pod, equipped with an emergency landing autopilot, then locates the nearest habitable area (it usually has radar sensors rated at 3), usually another ship or a planet. The crew of the pod may refuse certain destination choices, such as an enemy ship. The escape pod's computers look for the most basic life requirements, meaning that the planet it decides upon may be just marginally habitable. These computers, of course, are prone to failure. Some have been know to fly straight into a sun or crash into another ship.

Space Gear

Spacesuit
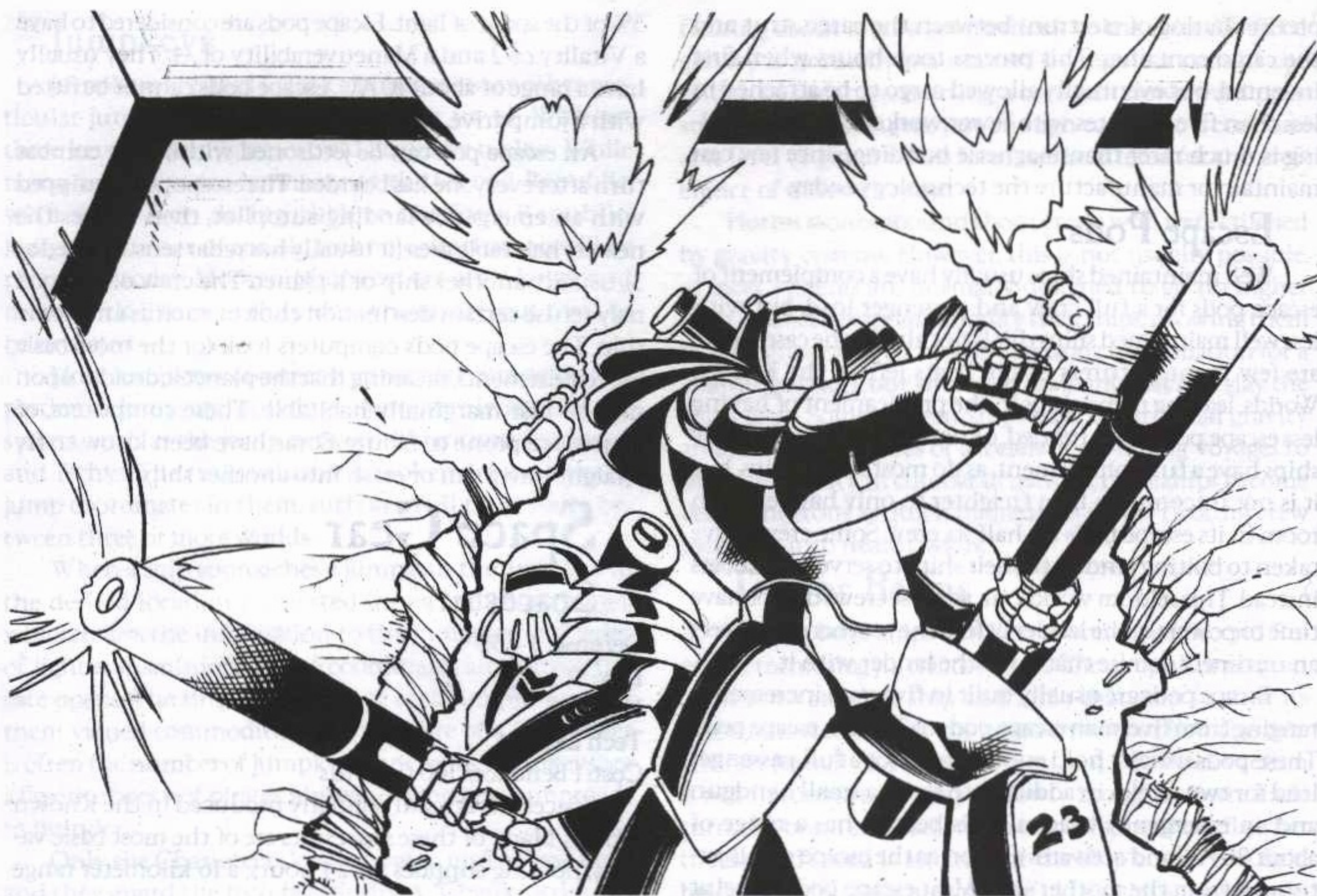
Defense: 3 + 3d
Dex: -2
Vigor: -2
Tech Level: 4
Cost: 1 Benefice/ 100 firebirds

Spacesuits are still regularly produced in the Known Worlds. Many of these spacesuits are of the most basic variety, holding supplies for 24 hours, a 16 kilometer range

radio, magnetic boots, and five patches. Most spacesuits are made out of plastic plates and various airtight fabrics; some are made of Polymer Knit. Most basic suits cost around 100 firebirds, with better suits going for what the market will bear. Very few spacesuits are available to fit Vorox; they must be custom ordered, which costs at least double the going rate.

If the wearer takes any Vitality damage, the suit has been holed and exposed to a vacuum. The wearer can seal one hole per action until he runs out of seals, but the whole time the suit is unsealed the wearer is affected by a vacuum. This does 8 damage points per turn until the holes are sealed. Extra seals can be purchased at a cost of 1 firebird per patch. Some of the older, synthsilk Second Republic suits are known to be self-sealing. These very rare suits seal all holes one action after breech. Many spacesuits also carry extras like grappling hooks and power assistance, but these are usually custom additions. Spacesuits are also commonly modified to hold more life support supplies. Life support refills are bought in six hour packs, with each pack costing 1 firebird.

Armored Spacesuit

An armored spacesuit is a normal spacesuit made with ceramsteel instead of plastic plate. These are still being produced, mainly on Tethys, for the Imperial fleet, but in much smaller numbers than standard spacesuits. These suits give the protection of ceramsteel (7+7d) to the wearer,

but when holed, act as standard spacesuits. Most armored spacesuits are powered for use in high-gravity situations. Armored spacesuits commonly have 48 hours of life support, a 24 kilometer radio, magnetic boots, and 10 patches. Armored spacesuits commonly cost 4 Benefice/800 firebirds, but are very rare outside of military organizations. Armored Spacesuits are Tech Level 5+.

Space Propulsion Pack

This large backpack contraption is used with spacesuits to provide mobility in space when a handy surface to push off of is not in reach. These packs are not in any way meant for long distance travel, because their max acceleration is 100 kilometers per hour. They are mainly used for exterior repairs and the occasional boarding action. The packs allow the user to turn himself in any direction through use of directional thrusters. These packs also have a plethora of hooks and magnetic pads for attaching equipment. A propulsion pack has a range of 10 kilometers, which usually translates to 30 hours of exterior work. A propulsion pack normally costs 30 firebirds and is Tech Level 4. A fuel refill normally costs 3 firebirds.

Hand Thruster

A hand thruster is a much smaller version of the propulsion pack, a thruster in a flashlight-like tube. It is usually reserved for emergencies, like when your propulsion pack unexpectedly decides to malfunction. It has a top

acceleration of 10 kilometers per hour and a range of only two kilometers. It is very difficult to do fine adjusting with the hand thruster; it is either on or off and has no other thrust control. Hand thrusters normally cost 5 firebirds and are Tech Level 4. A fuel refill costs 1 firebird.

New Benefice: Spacecraft

It is conceivable that a character could begin the game with ownership of a spacecraft, but it is unlikely. Such crafts are rare and expensive. A group of characters could go in on the cost together, but even then it is an expensive endeavor. There are, however, certain conditions which will bring down the Benefice cost of a ship; some suggestions are listed below. Gamemasters and players should feel free to create others.

Methods of Ownership

These conditions could also apply to vehicle ownership (see Chapter Two: Tools for vehicle Benefice costs).

Inheritance (-10%): You gained the ship from a departed relative, but her will stipulates certain conditions. These could be to simply defend the weak and right wrongs or to wage never-ending war against the filthy Hawkwoods. This relative's Reeve lawyers check up on you occasionally to make sure you keep your end of the bargain. If they decide that you have squandered the inheritance, they can take the ship away.

Gift (-15%): You gain the ship as a gift from a grateful friend/patron. This philanthropist is still alive and he can call the character(s) for a favor at some future date. If this favor is not granted, he can take the ship back. Actually, he can take the ship back at anytime, since he never actually signed ownership over to you.

Rental (-20%): You are only renting the ship; it actually belongs to someone else. In addition to the upkeep of the vessel, you must annually pay the owner in firebirds (usually 5-10% of its total cost), or perform some tasks for her, such as capturing a specimen of the rare, poisonous grackle fox of Vorox.

Booty (-25%): You took the ship as a war trophy from your defeated enemies. This means either that you took it from a barbarian raider, an alien, or you are old enough to have fought in the Emperor Wars. Legally, you may be recognized as the owner of the ship, but its ex-owners beg to differ; you have strong enemies. Either the barbarians are seeking to revenge their honor against you, the aliens are seeking legal redress or are sending assassins out, or the rival house or guild is setting you up for a fall.

Stolen (-30%): The ship is stolen. You may not be the thief, but be assured that, if caught with the vessel, you will be treated as one. The penalties for theft depend on the vessel and who its owner was. A small-time merchant may not be able to rouse much attention from the authorities, but a miffed noble will be sure to see you (and your gang of hoodlums) hang.

Ship's Condition

The following conditions apply only to spacecraft, not vehicles.

No Weapons (-5%): This condition applies only to ships that come with weapons as a standard option. None of the weapons listed as standard are currently mounted on the ship. It will cost to add them.

No Armor (-3% per point/ -2% per die): This condition applies only to ships that come with armor as a standard option. If the ship's armor has been fully stripped, its hull is exposed. While space debris may dent the hull, as long as its integrity (Vitality) is whole, there is no danger — unless another ship starts firing its guns.

No Shield (-10%): This condition applies only to ships that come with shields as a standard option. For some reason or another, this ship does not have the shields.

Less Integrity (-5% per Vitality point): The hull has been damaged and the ship's integrity has suffered. The degree of loss can be minor or great. Once a ship has no Vitality, it can no longer fly or support life.

No Jumpdrive (-20%): This condition applies only to ships which come with a jumpdrive as a standard option. For some reason or another, this ship's drive is disabled. It cannot travel through a jumpgate until it is fixed — a feat requiring a Merchant League engineer. Jumpdrives are encased in boxes designed to be opened only by qualified mechanics; any tampering is hard to hide.

No Landing (-10%): This condition applies only to ships which are Lander grade. For some reason or another, the ship cannot land. Perhaps its landing gear is missing or its reentry hull protection has degraded. It will take money and time to fix the problem. Until then, it is considered atmospheric grade.

Less Cargo (-1% per 10 tons): For some reason or another, the ship cannot carry as much cargo as it was originally designed for. Perhaps its interior space has been breached or its magnetic bonding struts have deteriorated.

Less Supplies (-1% per month): The ship's life support does not last as long as usual. Perhaps the oxygen canisters are broken, the filtration system is down or the food stores all go bad faster than they should.

Disabled Sathra Drive (+20%): This applies only to jump capable ships. The ship's integral Sathra damper has been disabled (whether purposefully or through a freak accident is up to the gamemaster). This means that the ship's pilot and navigator will experience the Sathra Effect whenever the ship enters a jumpgate (more details can be found in the **Byzantium Secundus** sourcebook or in future **Fading Suns** releases). This is highly illegal and extremely rare. If it were discovered, the crew would be suspicious to anyone: Sathraists are equated with demon cultists.

Hurdles

The following conditions provide distractions or annoyances to the workings of a ship. They apply only to spacecraft, not vehicles.

Infamous (-10%): The ship is well-known and will be recognized in many places — but this is not a good thing, for it has a bad rep. Perhaps it was once a pirate ship, a feared warship from the Emperor Wars noted for atrocities committed by its captain and/or crew, a barbarian flagship, or the dreaded Ghost Ship of Malignatius. Some people will shoot first and ask questions later.

Hull Rats (-5%): Most ships inevitably pick up a hull rat or two — this ship has a small brood living within it. They are nearly impossible to root out. These gremlins can cause all sorts of annoying problems, from eating the food stores, chewing think machine cables — whatever.

Weird Menace (-10 to 20%): Something is wrong with the ship that cannot be easily fixed. Perhaps it is haunted by ghosts, infected with Symbiot spores, infested with gremlins, overrun with nanite computers taking over the systems, or ruled by a mad think machine ("Daisy...daisy..."). The problem is not going to be solved quickly; it may require stages of discovery before the dilemma is even understood.

Incomprehensible Tech (-15%): The ship is a one-of-a-kind Second Republic or alien prototype whose workings are incomprehensible to even master Engineers. They'd have to take it apart for a few years before they could figure it all out. For now, it runs well — until it breaks down. Fixing it is a coin toss. In addition, many of the controls are plain weird; certain simple tasks may require sustained rolls.

Other Benefices

The following Benefices are available to those who are in possession of a spacecraft.

Service Contract (varies): A mechanic or organization (usually a guild of some sort) has been contracted to provide maintenance or repair when needed. For 5 points, the ship must be delivered to one of the mechanic's outlets (usually a spaceport or spacestation dock). For 10 points, the contractor will come to the ship to repair it; the owner must simply notify the contractor of the ship's location. This could take a long while if the contractor has no offices where the ship is located. Also, for 5 points the contractor will provide rudimentary parts at no extra cost (this does not include armor, weapons or significant Vitality repair). A Service Contract should not be abused; if the ship has to undergo too many repairs within a short period of time, the contractor may void the contract. These contracts usually last for one or two years before they must be renewed (the firebird cost is usually 1 – 5% of the ship's total cost), but some contractors will barter for favors instead.

Landing Berth (varies): The ship may land or dock at certain places without paying extra fees. For 3 points, there is a particular berth on a spacestation or planet where the ship can always land/dock. For 6 points, the ship can land/dock anyplace (this usually assumes the berth is one re-

served by the character's group, such as the Muster or the Avestites). The firebird costs for berths varies radically from world to world, but the average is about 25 firebirds per day, 150 per week, 500 per month, or 5000 per year. Money alone does not guarantee a steady berth, however. Social networks, gang ties or business associations go farther. In other words, if the port is owned by Scravers, a wealthy Baron may find himself and his ship booted out to make room for a visiting Scraver or Eskatonic priest who has business with the guild. This Benefice represents favors and ties which go beyond mere money, although it still does not make the recipient entirely immune from temporary eviction.

Passage Costs

Characters who do not own spacecraft or who do not work on one must pay for passage. Cost varies with the type of ship, the accommodations accepted and the length of the journey. Most ships do not allow passengers to carry weapons on board; they will confiscate them at the beginning of a journey and keep them in a weapons locker until arrival.

Tramp freighter: The worst accommodations available — crammed into a cargo box with a bunch of other passengers. Most people stake out a corner or imaginary square; on long journeys, territorial squabbles and fights are not unknown. There is little or no privacy under these conditions (blankets hung from the rafters at best). Sometimes, passengers share the space with cargo and are considered responsible for any damage to that cargo. This can be especially uncomfortable if the cargo is live animals. Bare rations are provided. The cost for this type of travel is usually 20 firebirds per person per jump, more if a lot of personal effects come along.

Transport: Better than a tramp freighter, the transport option is still not grand. While the passenger gets a room, he has to share it with nine other people. Most people get bunks, but at least three people get the floor (or hammocks). Unappetizing food staples are served in a common mess. The cost is usually 50 firebirds per person per jump.

Stateroom: A passenger shares a room with at least one other person. The room is not spacious, but it is far better than sharing the same size room with eight other people. Good meals are served in a cabin with the ship's crew. The cost is usually 100 firebirds per person per jump.

Luxury Liner: The best kind of travel. A spacious, comfortable stateroom is shared with no one (except, of course, those the passenger invites). Meals are either shared with the ship's officers in their dining room, or are served in the room itself, freshly cooked (well, as fresh as space food can get). Minor entertainments are usually available, in the form of magic lantern shows or live plays. The cost is usually 300 firebirds per person per jump, but this can be much higher for higher quality liners.

Crew Positions

It is likely that some player characters will seek out jobs in certain crew positions on spacecraft. Below are some guidelines for salaries; such payments vary radically, however. Use the following adjustments depending on who the employer is: noble house +10%, Church -10%, small guild -20%, independent contractor -30%. In addition, certain adjustments can be made for personal skill and rank: add +1% per skill level over 5; add +3% per guild rank over associate. A good or bad reputation may further adjust the pay rate.

Position	Pay per jump
Pilot	20
Navigator/communications	10
Engineer	15
Assistant engineer	7
Gunner	5
Security Guard	3
Purser	3
Butler/server	2
Stevedore	1

A crewmember also gets free meals during the journey. Pilots, navigators and engineers usually share a two or four-person stateroom. Other crewmembers share nine-person rooms.

Shuttle
Runt

Grade: Lander
Builder: Numerous shipyards throughout the Known Worlds
Tech Level: 5
Length: 10 meters
Width: 4 meters
Crew: 1 (pilot)
Passengers: 8
Cargo (Internal): 1 ton
Cargo (External): None
Speed: Mach 8 (14 days to jumpgate)
Jumps: None (100 AU range)
Supplies: 2 weeks
Sensors: Radar 3
Weaponry: None
Maneuvering: -1
Armor: 1
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0
Cost: 15 Benefice/ 15,000 firebirds

Description: Runt is the nickname for the small shuttle that is the most common type of lander in the Known Worlds. Runts are built by a myriad of companies with all manner of cosmetic differences, but generally perform much the same. Some, like the Nalhin Lightdancer, are aesthetic works of art, while others, like the Ambrin Workhorse, are sturdy and reliable above all else. Runts are seen as the old standby of landers and are not very advanced compared to jumpdrive craft, but they get their job done.

History: Runts were some of the very first spacecraft to be constructed under the First Republic. They were used for ship-to-ship transport and landing on planets when the mothership was to large to do so, in addition to interplanetary runs and simple moon shots. Runts gained a reputation of being the simplest kind of lander. They are very common and most are built with simple technology and therefore are simple to repair. Runts are one of the few ships being manufactured in significant numbers currently, because of their relatively low tech level. Even with the number of new runts being produced, it is not uncommon to see a Second Republic runt or one even dating back to the Diaspora.

Common Modifications: The most common Runt modification is more armor plating, as the ship does not have the power to support a shield. Weapons are normally absent; the ship was not designed with combat in mind. There are several package modifications available for Runts.

Item	Time	Pts	Cost
Vitality repair (1 pt)	8	12	1000
Armor (1 pt)	12	20	3000
Lt Laser	6	15	†

† See Spacecraft Weapons Chart
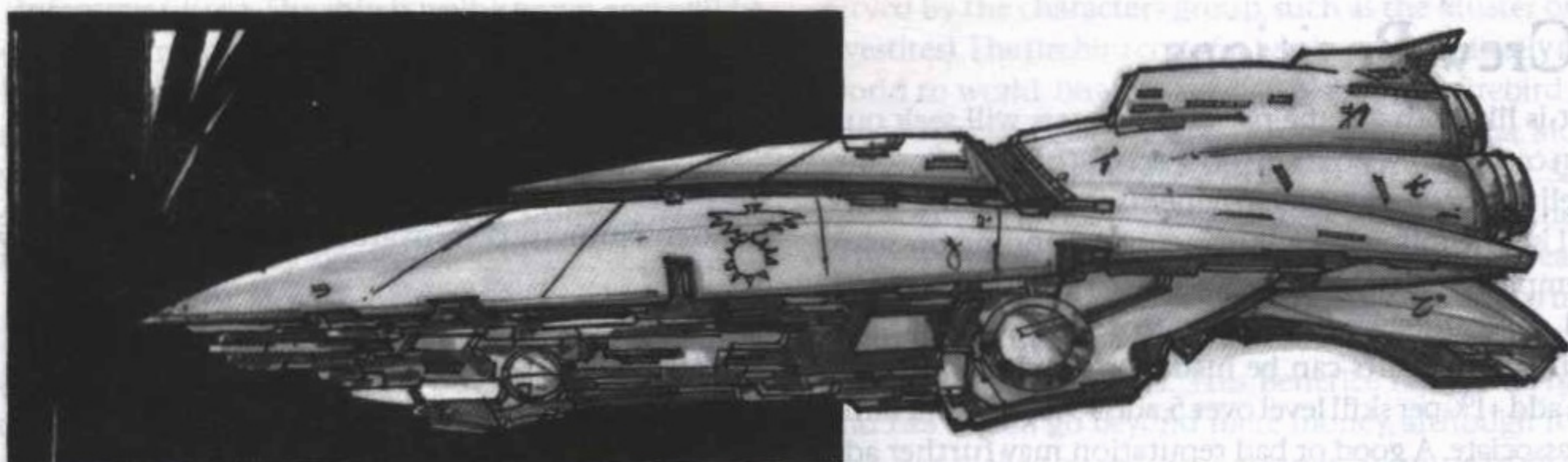
Scout

Imperial Lekaf

Grade: Lander
Builder: Vladimir Shipyards at Tethys
Tech Level: 6
Length: 40 meters
Width: 15 meters
Crew: 2 (pilot and copilot)
Passengers: 12
Cargo (Internal): 20 metric tons
Cargo (External): None
Speed: 20% lightspeed (5 days to jumpgate)
Jumps: 5 (generator)
Supplies: 3 months for the crew and a full passenger load
Sensors: ECM 8
Weaponry: Med Blasters turrets x2
Maneuvering: +0
Armor: 2 + 2d
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 100 Benefice/ 200,000 firebirds

Description: The Imperial Lekaf is a fairly sturdy ship for its small size. It uses a half ellipse design popular in the Known Worlds. Since it is intended as a long range exploration vessel, it was designed to carry overly large fusion stores, food supplies and cargo. The Lekaf is also particularly well armed for an exploration craft, making it a common choice for scouting trips into Vuldrok or Kurgan space. The ship has two heavy lifter arms built into the lower hull, commonly used for plucking up specimens or clearing a landing field by uprooting whatever is in the way. The Lekaf features arguably the best navigational system of any nonmilitary craft. It rarely takes more than 10 seconds for the Lekaf to determine its position, even when going through a jumpgate to an unfamiliar location.

History: The now-extinct Lekaf was a large, flightless bird native to Tethys, known for being able to run days on end at full speed without stopping for food, water or rest. The Lekaf's talons were also able to supposedly slice through synthsilk with ease. The ship of the same name was designed by Second Republic engineers as a cheap, long range exploration craft; few of the most advanced technologies produced at that time were utilized. Because

of this, the Lekaf was never built in large numbers beyond a small test run. This changed 20 years ago when the plans were unearthed on Byzantium Secundus. Now the ship is no longer obsolete and is instead respectably advanced. The Emperor desired a fleet of dedicated scout ships, especially ones as well armed as the Lekaf.

Common Modifications: The most common modifications to the Lekaf is adding armor plating or a shield generator. The ship can hold up to an assault shield, though this requires removing its aft blaster cannon. Some captains bolt extra external fuel and supply tanks onto the ship when they expect especially long voyages.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	6	9	Vitality	1000
Armor (1 pt)	10	15	+2 points	3000
Armor (1 die)	8	10	+2 die	1500
+1% lightspeed	16	12	+10%	10,000
Shield†	16+	12+	Assault	
Neutrino 10	10	15	1 pkg	10,000
External cargo*	5+tons	4+tons	10 tons	1000/ton

† Add shield's rating to Time and Pts; see Energy Shields for costs
* 10 tons of fuel allows one more jump.

Troop Transport

Republic Dropship

Grade: Lander
Builder: Republic Shipyards at Criticorum
Tech Level: 7
Length: 20 meters
Width: 8 meters
Crew: 8 (pilot, copilot and six gunners)
Passengers: 64
Cargo (Internal): 4 metric tons
Cargo (External): None
Speed: Mach 10 (12 days to jumpgate)
Jumps: None (100 AU range)
Supplies: 1 month
Sensors: ECM 8
Weaponry: Antipersonnel Blaster turrets x4, Antiarmor Med Blaster turrets x2
Maneuvering: +2
Armor: 3 + 3d
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Cost: 30 Benefice/ 50,000 firebirds

Description: This boxy craft is not built for aesthetics but rugged survivability. The Republic Dropships were meant to be flown into heavy combat zones to drop their troops off and return to orbit to get more troops. The dropship requires no landing pad and only marginally clear terrain; it can hover if it is not able to touch down. The ship makes use of the same anti-gravity technology used in hoppers to allow it to hover just about the ground while disgorging troops and to maneuver in an atmosphere despite its awkward, bulky frame. The ship is expected to destroy any obvious armor units or concentrations of infantry in the area before landing so its troop load would not have to deal with them. Some dropships were also equipped with bombs or gas dispensers to better clear the landing zone. Dropships are capable of being locked onto the cargo struts of a freighter with little difficulty.

History: The dropship was the standard planetary invasion craft of the Second Republic, used for quick surgical strikes and for ferrying important persons off world. The dropship became a symbol of the Second Republic military, reliable and hardworking in the face of adversity. To various alien races, though, it was the very symbol of oppression; dropships were usually one of the first signs that humans coveted the aliens' world. The ships were built in many shipyards and were the primary lander of the military in combat situations. Because of the large production number and reliability of the craft, many are still being used by the Muster and House Hazat in military operations.

Common Modifications: The most common modification to a dropship is a weapons change; the original design was supposed to have a modular weapons system so armaments could be tailored to a particular mission. Because of this, there are too many weapon combinations to list here. The next-most common modification is additional armor or speed.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	6	6	Vitality	1000
Hull strength (1 pt)	20	16	+2 Vitality	5000
Armor (1 pt)	10	10	+2 pts	3000
Armor (1 die)	8	8	+2 die	1500
Shield†	16+	12+	Standard	
Extra weapon*	8	6	2 weapons	††

† Add shield's rating to Time and Pts; see Energy Shields for costs
* If two weapons and a shield are both added, each weapon suffers a -2 damage penalty and the shield suffers a -3 rating penalty
†† See Spacecraft Weapons Chart

Haulers

Ambrim 5700

Grade: Atmospheric
Builder: Ambrim (an engineering family allied to House Hawkwood) at Tethys
Tech Level: 6

Length: 120 meters
Width: 40 meters with the side cargo struts, 20 meters without
Crew: 2 (pilot and engineer/gunner)
Passengers: 2 (or 2 stevedore crewmembers)
Cargo (Internal): 10 metric tons
Cargo (External): 450 metric tons (clamp, magnetic, fusion)
Speed: 10% lightspeed (8 days to jumpgate)
Jumps: 3 (generator)
Supplies: 2 months
Sensors: Radar 5, Laser radar 5
Weaponry: Lt Blaster mounts x2
Armor: 2
Shield: Vambrace
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 80 Benefice/ 80,000 firebirds

Description: The Ambrim 5700 — or the A-57 — is a relatively new entry into the freighter market. It follows the standard freighter design of functionality over appearance. Its rear 20 meters contain the fusion engines and the cockpit area while the rest of the ship's length is taken up by two immense cargo struts. One blaster cannon is located on the forward tip of starboard cargo strut while the other is above the cockpit area. The ship also has two smaller cargo struts, each 10 meters long, going out to either side of the cockpit area. The ship can attach cargo containers with clasp hand, magnetic or fusion bonding. The ship is not very combat worthy at all, usually traveling in caravans with escort craft.

History: The A-57 is a supposedly cutting edge technology freighter that Ambrim hopes will take the shipping community by storm. Its main drawback is that it belongs nowhere near a fight, but they are nonetheless becoming an increasingly common sight in the Known Worlds.

Common Modifications: The most common modification is a weapons upgrade, usually to Med Blaster turrets. Another common modification is a shield, as the 5700 readily accepts any of the Ambrim line of shields. Speed and armor plating are normally not added as they decrease or endanger the external cargo areas.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	12	6	Vitality	1000
Armor (1 pt)*	16	8	+1 pt	3000
Armor (1 die)*	12	6	+2 die	1500
+1% lightspeed	24	16	+5%	10,000
Shields†	12+	8+	Battle	
Med Blasters upgrade	8	15		3000

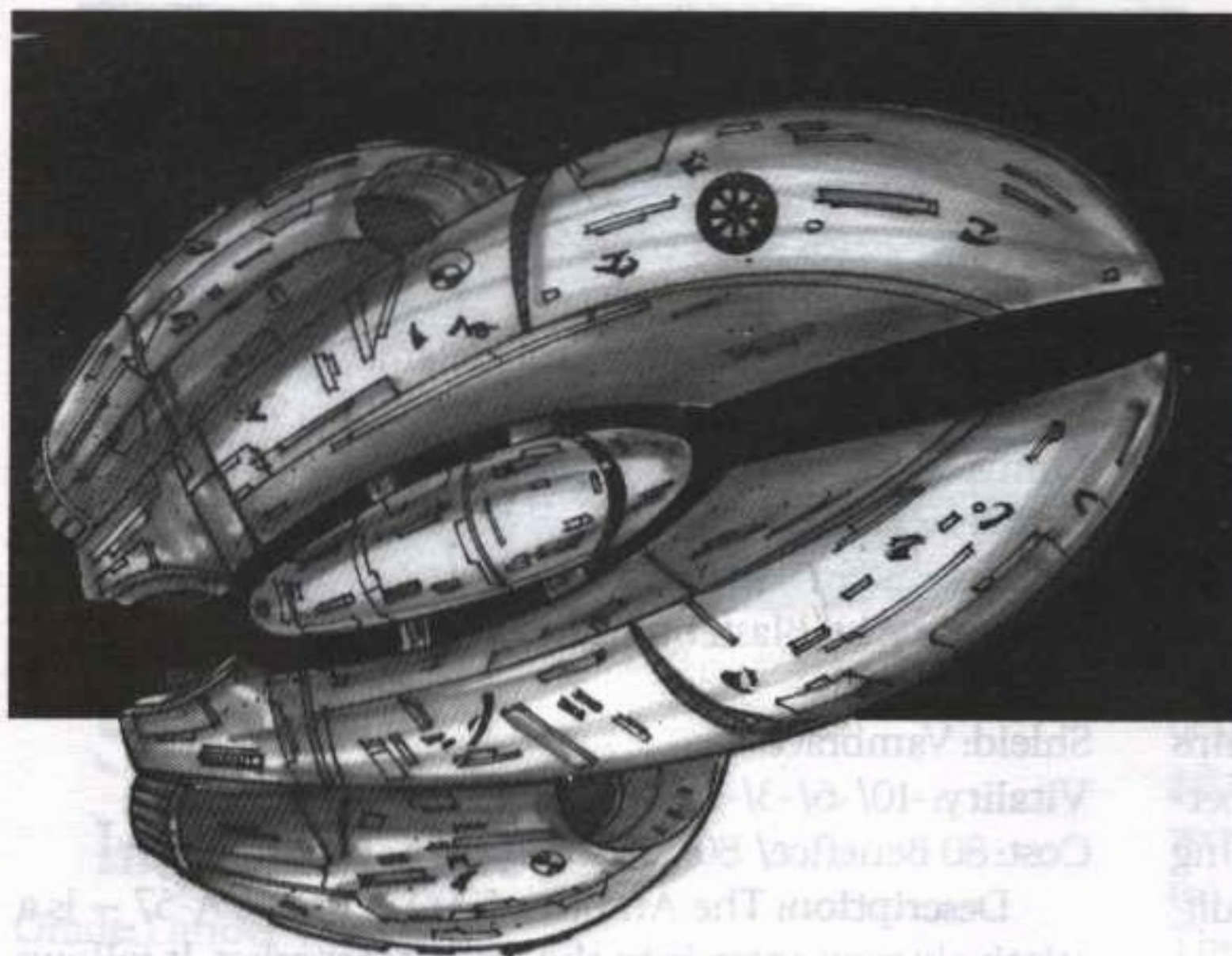* Each additional point (or two dice) of armor subtracts 20 tons from the external cargo load.
† Add shield's rating to Time and Pts; see Energy Shields for costs

Hazred Swellingpug

Grade: Atmospheric
Builder: Hazred (an engineering family allied to House al-Malik) at Criticorum Shipyards
Tech Level: 6

Length: 100 meters
Width: 50 meters
Crew: 3 (pilot, copilot/gunner and engineer/gunner)
Passengers: 2 (or 2 stevedore crewmembers)
Cargo (Internal): 200 metric tons
Cargo (External): 300 metric tons (clamp, magnetic)
Speed: 10% lightspeed (8 days to jumpgate)
Jumps: 2
Supplies: 1 month
Sensors: Radar 5, Laser radar 5
Weaponry: Medium Laser mounts x2
Maneuvering: -2
Armor: 2 + 2d
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 60 Benefice/ 60,000 firebirds

Description: The Hazred Swellingpug is a very old craft, and most Swellingpugs look their age. They appear to be very rickety and makeshift next to the more common freighters with their large, ominous cargo struts. The shape is an ellipse split lengthwise down the middle with one end cut off. The cockpit and living quarters lie between the two halves of the ellipse and the engines make up the cut-off end. Both halves of the ellipse house huge internal cargo bays, the walls and floors of which are magnetized so the containers don't move around in transit. The outer hull of the ship is also magnetized, allowing cargo to cover the outside. Cargo haulers usually put their less valuable cargo on the outer hull and place the more expensive goods inside the hull. The ship's two laser turrets are mounted above and below the cockpit area.

History: The Swellingpug is named after a small, roly-poly mammal native to Aylon, known for being able to stuff a cubic meter of matter into its mouth whole. This craft is one of the oldest still in production, but this may not last for long due to lagging sales. The Swellingpug is mainly favored by old school traders who grew up flying one and will pilot nothing else. This leads to few new sales of the ship, however, despite the dedicated following. The ship has a reputation among many pilots as a death trap or a pirate attack waiting to happen, which isn't far from the truth. The hulls of the cargo areas are notoriously thin, and prone to bursting at the slightest urging. Still, it has the largest cargo capacity for a ship its size, and is good for transporting valuable cargo out of sight. Because of this, and the commonplace appearance of the ship, the Swellingpug has become a favorite of the Muster.

Common Modifications: The most common modification on the Swellingpug is a engine upgrade. Many pilots know the ship isn't a combat vessel, and don't want to risk their cargo-covered hull getting shot up. Some ships are outfitted with shields; this usually requires the removal of one of the laser turrets, to supply the necessary power. The Imperial Eye is rumored to use modified versions of the Swellingpug filled with sensor arrays for spying on smugglers and other undesirables without attracting notice.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	12	9	Vitality	1000
Armor (1 pt)	20	12	+2 pts	3000
Armor (1 die)	15	10	+2 die	1500
+1% lightspeed	18	16	+5%	10,000
Shield†	15+	8+	Standard	
Hvy Laser *	8	14	upgrade	2100

† Requires removal of one Med Laser. Add shield's rating to Time and Pts; see Energy Shields for costs
* Requires removal of both Medium Lasers

Jumptug

Grade: Lander
Builder: Novgorad Shipyards at Byzantium Secundus
Tech Level: 8
Length: 60 meters
Width: 10 meters
Crew: 2 (pilot and copilot)
Passengers: 2
Cargo (Internal): 2 metric tons
Cargo (External): Up too 1000 metric tons in tractor beam or 1 spacecraft of equal or smaller size
Speed: 10% lightspeed (8 days to jumpgate)
Jumps: 4 (generator)
Supplies: 2 months of consumables for the crew only
Sensors: ECM 8
Weaponry: Med Laser mounts x2
Maneuvering: -2
Armor: 2
Shield: Vambrace
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 100 Benefice/ 100,000 firebirds

Description: The Jumptug is a welcome to sight to stranded spacecraft owners as it is often the only way to save a stranded ship. Using a special form of tractor beam, the ship can pull other ships of up to 1000 metric tons.

This even allows another ship to be pulled through a jumpgate. This technology was cutting edge at the end of the Second Republic, and now is poorly understood at best. For ships larger than 1000 metric tons, several jumptugs can work together to drag the craft along, but this slows them down greatly and coordinating a jump in this condition is a nightmare. The jumptug has minimal weaponry because, at the time of their construction, escort ships were plentiful. Now, with the current dearth of ships, jumptugs have become a favorite target of pirates, as they have few defenses and their charges are usually helpless.

History: Jumptugs were originally built at the height of the Second Republic to serve as part of a space rescue system working out of various systems throughout the Known Worlds. The so-called Ship Rescue Service was funded by various fines and levies on ships and space travel, and did a magnificent job of rescuing damaged ships until the collapse of the Second Republic. There was originally envisioned one jumptug per inhabited system, but this level of readiness was never actually reached due to funding shortages. Soon after the Fall, many jumptug precincts still tried to perform their jobs, but soon ran short of supplies. Within a few decades, almost all the jumptugs had been taken by various factions, such as the noble houses and the League, used to rescue only those factions' ships. Some jumptugs have remained independent by charging rescued ships for their services, and others are used by pirates as boarding ships. Jumptugs are rarely used purposefully in any kind of ship-to-ship battle, but many factions use them as boarding vessels or to haul home the gains of war.

Common Modifications: The most common modification is the addition of more weaponry and shields. Many pirate crews replace the two laser cannons with blaster cannons as the jumptug has an enormous power plant with energy to spare. Many crews who still use the ship as a rescue vessel attempt to increase the engine output for better performance.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	9	12	Vitality	1000
Armor (1 pt)	12	16	+2 pts	3000
Armor (1 die)	10	14	+2 die	1500
+1% lightspeed	20	12	+5%	10,000
Blaster upgrade	8	6		*
Shield†	16+	12+	Battle	
External cargo	5+tons	4+tons	10 tons	3000/ton

* See Spacecraft Weapons Chart

† Add shield's rating to Time and Pts; see Energy Shields for costs

Luxury Liners

Starway Yacht

Grade: Atmospheric
Builder: Nalhin (an independent guild) at Criticorum
Tech Level: 6

Length: 45 meters
Width: 20 meters
Crew: 8 (pilot, copilot/gunner, purser and 5 servants)
Passengers: 20
Cargo (Internal): 2 metric tons
Cargo (External): 10 metric tons (fusion)
Speed: 15% lightspeed (6 days to jumpgate)
Jumps: 3 (generator)
Supplies: 2 months
Sensors: Neutrino 7
Weaponry: Med Laser turret
Maneuvering: +1
Armor: 1
Vitality: -10/-6/-3/-1/0/0/0/0/0/0
Cost: 150 Benefice/ 150,000 firebirds

Description: The Starway Yacht, while not the sturdiest or most combat worthy ship, is a thing of beauty. It is a half ellipse with hull sections of transparent plastic so that passengers can look out into space from observation decks. Of course, transparent plastic is not as strong as steel or armor plating; this limits the punishment the hull can take. But this yacht was never built to fight or race, only to provide a relaxing and pleasant get away. The ship comes in a plethora of designer colors and fixtures, and each room of the ship has at least six different options for the decor, ranging from Dark Ages Gothic to Second Republic Industrial. All Starway Yachts come fully furnished with the best decorations available, which is reflected in the price. The Nalhin guild even offers servant contracts through an arrangement with the Muster, which attaches servants to the ship.

History: Among the wealthy the Starway Yacht is the only ship to be seen in when traveling safe space. It is all the rage among the noble houses, except for House Hazat, which prefers sturdier, military craft. Outside of the nobility, however, few people have shown any interest in the ships, many believing that they are deathtraps waiting to happen. You will rarely find a Starway outside of the most heavily patrolled areas of the Known Worlds, and when encountered, it usually has an escort of combat ships.

Common Modifications: The Starway does not belong in a fight. Because of this, few crews have wasted their time on armor or weapon modifications, though most nobles add shields. Some Starway owners have plated over the glass viewports of the ship with ceramsteel or other materials to give it some extra protection, but this is generally thought of as wasted effort. Nalhin has just introduced an upgrade package called Safetight that solves many of the problems of the Starway. It gives the ship an armor rating of 2 + 2d, adds a standard shield and switches out the Med Laser for a Med Blaster. This kit is very expensive, however, but is expected to be extremely popular.

Item	Time	Pts	Max	Cost
Vitality repair (per pt)	5	9	Vitality	1000
Armor (per pt)	6	10	+2 pts	3000
Armor (per die)	4	8	+2 die	1500

Item	Time	Pts	Max	Cost
+1% lightspeed	16	14	+10%	10,000
Shield†	10+	8+	Assault	†
Safetight pkg	22	16	1 pkg	16,000

† Add shield's rating to Time and Pts; see Energy Shields for costs

Empyrean Luxury

Grade: Void
Builder: Van Goss Builders (an independent guild) at Leagueheim
Tech Level: 6
Length: 500 meters
Width: 100 meters
Crew: 128
Passengers: 560
Cargo (Internal): 50 metric tons
Cargo (External): 300 metric tons (fusion)
Speed: 10% lightspeed (8 days to jumpgate)
Jumps: 2 (generator)
Supplies: 12 months
Sensors: ECM 7
Weaponry: Lt Blasters turrets x4
Maneuvering: -7
Armor: 2 + 2d
Shields: Standard
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 300 Benefice/ 500,000 firebirds

Description: Much like the Starway Yacht, the Empyrean Luxury is a very pretty and entertaining craft, but not built for dependability. It is a very large craft, larger than most bulk freighters; most of it is occupied by spacious living quarters. The ship also has a sizable exterior cargo load for luggage and all the necessary equipment to keep the wealthy patrons happy. However, the only way a Luxury could escape a fight is through the sheer amount of damage required to destroy a craft of its size. The ship has average armor plating for a civilian craft but horrid maneuverability and a poor weapons selection. Right after bulk freighters, Empyrean liners are the most preferred targets of pirates.

History: Starliners have not changed much since the Second Republic. Most research in the dark ages goes into military sciences, and these civilian ships have been left pretty much the same. Once a very common sight in space, starliners are becoming fewer and fewer as less people can afford pleasure voyages. Even most nobles and guildsmen prefer using private craft for that extra feeling of security. Trying to build off of the success of the Nalhin guild's Starway Yacht, the Van Goss family has started the ambitious project of reviving the sagging starliner business with the production of the Empyrean Luxury. While many nobles seem to like the new craft, the detractors of the Starway Yacht have found that many of that ship's problems remain in the Luxury. Nonetheless, some noble houses have taken an interest in promoting these ships as prime places to hold diplomatic talks, cloistered away from prying eyes but not luxury.

Common Modifications: Few modifications are made to starliners. When more combat readiness is required, the owners usually hire escorts.

Fighters

Imperial Archangel

Grade: Lander
Builder: Vladimir Shipyards at Tethys
Tech Level: 7
Length: 15 meters
Width: 8 meters
Crew: 1
Passengers: None
Cargo (Internal): 100 lbs.
Cargo (External): None
Speed: 20% lightspeed (5 days to jumpgate)
Jumps: None (50 AU range)
Supplies: 1 week
Sensors: Neutrinos 5
Weaponry: Med Blaster mounts x2 (forward firing)
Maneuvering: +2
Armor: 3 + 3d
Vitality: -10/ -6/ -3/ 1/ 0/ 0/ 0
Cost: 90 Benefice/ 180,000 firebirds

Description: The Imperial Archangel is the premier heavy combat fighter of the day, despite the fact the ship dates back to the Emperor Wars. It has a very respectable weapons load and thick armor for a fighter; a small fleet can greatly harry a frigate or destroyer. The ship is an all-around solid design; the drawback is that three smaller

fighters (Paladins) could be made with the same materials. Since the Archangel has no jumpdrive and a short range, it must be based off a carrier or other fighter-carrying ship.

History: The Archangel is a workhorse of a fighter. It served honorably in Hawkwood fleets during the Emperor Wars, making the fighters a favorite of Emperor Alexius. He has made the Archangel a common sight in the Imperial Fleet. Sections of the Manx Shipyards on Byzantium Secundus are currently being retooled to increase new output of the ship. Archangels also see heavy use as system patrol ships in pirate-heavy areas.

Common Modifications: Because the majority of Archangel's are military craft, very few have been customized. One common military change, though, is the switching out of blaster mounts for torpedo or missile racks. Because of the modular design of the weapons, this normally takes very little time. Most Hawkwood ships are equipped with the Hawk Talon package, which adds two points of armor and a vambrace shield. This package is only available from House Hawkwood and is very rare outside of their forces.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	9	6	Vitality	1000
Armor (1 p)	10	6	+2 pts	3000
Armor (1 die)	8	6	+1 die	1500
+1% lightspeed*	16	14	+10%	10,000
Rocket/Torpedo/Missile	2	5	Switch	**
Hawk Talon pkg	16	14	1 pkg	10,000

* Subtract one AU from the fighter's range for each percentage

ing to its target on its way in, release its torpedo at close range, and manage to get away without being annihilated. In addition to the system necessary to target torpedoes, the Prophet has an impressive sensor array for detecting the vital parts to hit on large ships. The Prophet is also capable of long range strikes, carrying enough supplies to support both its crew members for up too two weeks in space. But the Prophet has no jumpdrive and must be based on a jump capable carrier to move from its home system.

History: The Prophet was put into production on Kish early in the Emperor Wars and has been a constant success since then. It is the most common torpedo bomber in any fleet. Serving in a Prophet wing is considered a quick path to glory — but also a quick path to an early grave; flying straight at ships 100 times your size is always a risky endeavor. This makes most Prophet pilots seem a little quirky after a few missions, foolish daredevils with little or no fear of death. The Prophet has seen extensive use in every corner of the Known Worlds, especially at the Vuldrok and Kurgan borders. Some of the ships have become available to the public, but this is a very rare thing, as none of the powers-that-be want such a heavily armed ship in other hands.

Common Modifications: Since the Prophet is a military craft, few modifications are usually made to it.

Item	Time	Pts	Max	Cost
Vitality repair (1 pt)	6	6	Vitality	1000
Armor (1 pt)	10	12	+1 pt	3000
Armor (1 die)	10	8	+1 die	1500

Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0

Cost: 300 Benefice/ 600,000 firebirds

Description: The Kylanthra Class Escort Frigate is one of the smallest capital ships, yet still large compared to most spacecraft. The Kylanthra was designed as an anti-fighter and torpedo escort craft, which is why it lacks any really heavy hitting weapons, instead carrying many smaller weapons. An all-around good combat ship, with sizable armor plating and good hull strength, it is a fast craft for its size, able to keep up with most freighters and other smaller craft. The Kylanthra was designed to form part of a fleet and requires a large crew (mostly engineers and gunners).

History: The Kylanthra Class Escort Frigate, named for the Diaspora war heroine Kylanthra Calis Hazat, was one of the most heavily decorated ships of the Second Republic. Designed as an escort for battleships and cruisers, it was meant to take care of fighters and torpedo fighters so that the larger craft wouldn't have to waste their large guns on such small targets.

The Kylanthras earned a reputation for loyalty to the very end. The crews of these ships were some of the most fervent and brave of the Second Republic, never retreating until their charges were safely away. Of course, this caused a high casualty ratio among the Kylanthras, but the Republic was ever-ready to produce more as the frigates became symbols of die-hard bravery. Kylanthra crew positions were a heavily requested assignment; if you survived the tour of duty, a quick road to promotion awaited.

After the fall of the Second Republic, the Kylanthras, with no fleets to guard, became system patrol ships and anti-pirating vessels. The few that now remain are used by the Imperial Fleet or as patrol ships in outlying systems. They still hold a certain mystique about them, and many larger ships avoid facing the fanatics of a Kylanthra Class Escort Frigate.

Hearth Inquisition Frigate ("The Rack")

Grade: Lander
Builder: Lextius Shipyards at Midian
Tech Level: 6
Length: 140 meters
Width: 35 meters
Crew: 34
Passengers: 84
Cargo (Internal): 100 metric tons
Cargo (External): None
Speed: 15% lightspeed (6 days to jumpgate)
Jumps: 3
Supplies: 8 months of supplies for the crew and passengers
Sensors: Neutrinos 10, ECM 8
Weaponry: Lt Blaster turrets x10, Lt Meson Cannon mount, Plasma Bombs
Maneuvering: -3
Armor: 4 + 4d
Shields: Standard
Vitality: -10/ -6/ -3/ -1/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0/ 0
Cost: 200 Benefice/ 500,000 firebirds

Description: The Hearth Inquisition Frigate barely qualifies as a frigate because of its small size. It is a ship mainly designed to deliver planetary bombardment or tackle pirates. It is not a heavy combat craft, though it can hold its own against nonmilitary craft and fighters. Half its passenger load is designated for Inquisitor troops; the other half is for prisoners. These ships usually have fully stocked "interrogation" rooms. Some Hearth frigates also carry a dropship for hostile cleansings and as ground-support craft.

History: The Hearth Inquisition Frigate is now used by the Church for cleansing missions, searching for proscribed laboratories, destroying them, and delivering their scientists into slavery or imprisonment. One fully stocked frigate is enough to handle the average group of heretics, although a small escort of freighters is sometimes brought along to haul away vile technology for further study. The ships themselves are actually Second Republic prisoner transport ships the Church seized and refitted for their needs. They have served admirably, eradicating both pirates and heretics. The Hearth has become the Church vessel of choice for most combat missions, as it has a flexible weapons load and plenty of room to carry troops. The ship's name comes from the fact that it keeps the cleansing flame of the Inquisition safe from the vacuum of space in performance of its holy duty. Those that it hunts, however, have christened the vessel the Rack. Most spaceport controllers loathe the appearance of an Inquisition frigate on their sensors — the number of docked vessels requesting immediate launch clearance quickly skyrockets.

Other Ships

There are many other types of spacecraft, from short-range exploration vessels to destroyers, cruisers and carriers. However, the larger military ships are well beyond the scale of most encounters — they carry enough armaments to scatter most smaller ships across the void. Additionally, they are not available for sale to individuals except the heads of noble households, the Leaguemeister, the Patriarch or the Emperor. Future **Fading Suns** supplements will introduce more spacecraft.
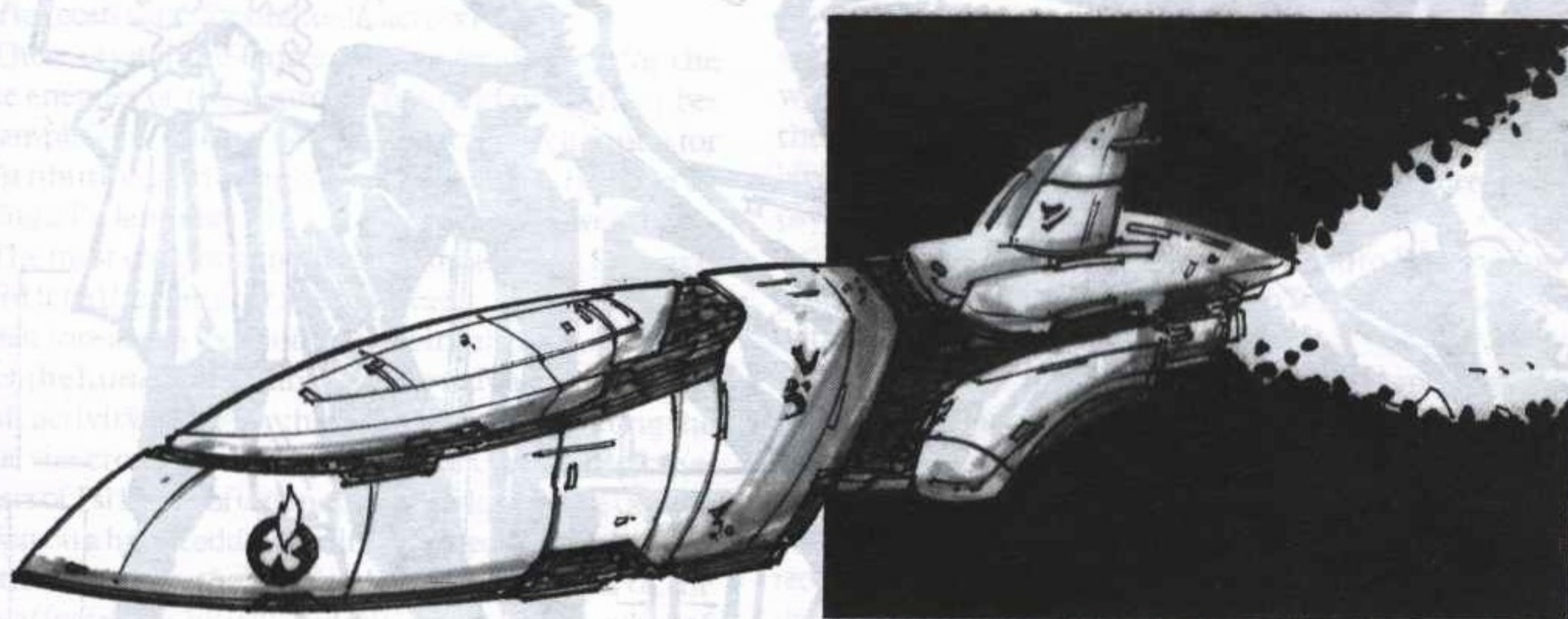
Chapter Five: Weird Tech

Psi Tech
Psi Lens
(a.k.a. Pineal lens, Third Eye lens, Chakra lens)

(Proscribed)
Category: Psionic Enhancer
Tech Level: 8
Firebird cost: 1000 - 5,000
Benefice cost: 12 (15 for original Lacroix)

These crystalline lenses create a focal point for the subtle energies of the neuroelectric field of sentient beings, amplifying psionic power and clearing channels for its distribution and projection. Any person holding or wearing a Psi lens may add +2 to all psychic power rolls.

The most common method of employing a Psi lens is to hold it to the center of the forehead, cited in surviving Phavian lore as the location of the pineal gland, that portion of the humanoid brain most strongly associated with psionic activity. Some psychics claim that positioning the lens at the crown of the skull can be equally effective. Owners of Psi lenses often mount their lens in the desired location on a hat, headdress, helmet or piece of jewelry (and sometimes even in the wildly elaborate hairstyles of the more affected nobility). Practitioners of the path of FarHand tend to instinctively hold the lens at arm's length, aiming it at their target; when this is done in conjunction with the Throwing, Crushing or Dueling Hand powers during combat, add +1 to the Throwing, Fight, Melee or Shoot rolls.

The majority of Psi lenses are disks, from two to ten centimeters in diameter and convex on one side, composed of clear, colorless crystal, although those of later manufacture come in a wide variety of decorative shapes and colors. Psi lenses have been known to deteriorate somewhat with age and excessive use or abuse. Lenses which have been kept as heirlooms by families with strong tendencies toward hereditary psychism tend to have milky or cloudy interiors. A lens which has been repeatedly used in very emotionally charged situations usually takes on the auric color which corresponds to that emotion. (E.g., one Hazat psychic, known for his short temper, often used his Psi lens to BrainBlast his foes in fits of rage; that lens, now kept under lock and key deep within a Hazat household vault, is reputed to have a garish blood-red luster.) Occasionally a lens turns up with a jet-black appearance like obsidian; these are believed to have been used in Antinomian rites, and are immediately confiscated by the Church and launched into the heart of the nearest sun.

Many lenses of later manufacture were flawed in some way. This flaw may be as slight as a +1 modifier instead of the normal +2, or may cause the psychic effect to be delayed by a random amount of time, or may redirect the psychic action toward an unintended target.

When not in use, a Psi lens is invisible to Wyrd vision powers, but scintillates sharply when Psi energy is focused within it.

History: The first Psi lenses were developed by the Phavian luminary Dr. Angus de Lacroix from the fragments of a Soul Shard which had been destroyed in some ancient geologic upheaval on the planet Manitou. Utilizing the poorly understood "crystalmorphing" technology recently stolen from the Vau, Dr. de Lacroix was able to shape the fragments into simple utilitarian lenses which were polarized on the subatomic level, making them powerful conductors of psionic energy. Early testing showed that the amplifying power of the lens caused increases in the clarity of telepathic transmission and extrasensory reception, as well as the strength, adjustment and fine manipulation of physical forces generated by telekinesis.

Satisfied that his invention was a safe and effective aid for personal development and the further evolution of mankind, Dr. de Lacroix personally supervised the creation of over one thousand Psi lenses before meeting an untimely death in a yachting accident. The production of the lenses was continued by his research assistants, Dr. Edwin-Powys Darling and Dr. Otto Switi, two shy and re-

A Psyber-implant is a high-gain electrical circuit connecting the pineal gland with a mechanical time keeping device embedded somewhere in the cranial cavity, wiring the inner brain with external "contact points" on the scalp and forehead. This attunes the psychic's natural brainwaves with the artificial rhythms of technology, teaching the mind to think like a machine and thus allowing for a greater degree of interface between psychic powers and machines.

A Psyber-implant is not linked to machines through any type of radio or energy transmission, and so a psychic's link with a machine cannot be jammed or intercepted by conventional technology. Contact is psychic, and may only be disrupted by psionic means. Any individual device, whether a tool, weapon, vehicle or musical instrument, may be "Bonded" to an implantee, either through intensive training or long familiarity.

There are four types of Psyber-implants: High Tech, Mech, Think Machine or Volt. Each type can only affect machines or aspects of machines of that type (e.g., using a Volt implant to interfere with the electrical ignition of an antique combustion driven vehicle). Characters may have as many different types of implants installed in their skull as they can afford (within their total cybertrait allowance), though the gamemaster may impose a penalty on Wits rolls if he feels the character is getting too top heavy. Once one Psyber-implant has been installed, 1000 firebirds may be subtracted from the surgery cost for any subsequent implantation, since the deep surgical placement of an electrode collar on the pineal gland need not be repeated.

A psychic using a Psyber-implant receives +3 for all goal rolls to affect her Bonded device(s) and +2 to manipulate any other machine of the implant's type.

History: The Psyber-implant has its origin in the cybernetic targeting and guidance systems used by fighter pilots in the early days of the Second Republic. Some pilots began to report the experience of "melding" with their vehicles, of feeling the frame and functions of the fighter as if it were their own body. Ensuing tests under simulated combat conditions showed that these particular pilots were able to push themselves and their craft beyond all the maximum parameters of their design and performance specifications. Further investigation revealed that the pilots were all latent or untrained psychics, and a fevered and secretive period of research and development followed, finally resulting in a crude prototype of the modern Psyber-implant. This primitive apparatus was not a true psionic enhancer, as it was dedicated only to the telekinetic task of tripping servoswitches on prepared machines.

In the latter half of the Second Republic, public outcry arose against the manufacturers of the implants, Rockhardt Enterprises, when certain old research documentation tapes were leaked to the public. One recording showed one of the original psychic fighter pilots,

tiring academics who suddenly found themselves captains of a booming industry. The Psi lens became one of the major fashion fads of the late Second Republic as word-of-mouth spread and the psychologically transformative effects of the lenses were exaggerated. Production volume was stepped up, and experimentation led to alterations in lens shape and color.

It is believed that this economic pressure, coupled with Drs. Darling's and Switi's imperfect understanding of the crystalmorphing technique, resulted in a number of flawed lenses. Many tales of the "cursed family jewels" of this or that noble house probably have their origins in these flawed Psi lenses. Of those lenses that retain the traditional shape and colorlessness, an original Lacroix product may be identified by the "invisible" serial number near the rim of the lens's flat side; this number may only be read with an ultraviolet light source and 100X magnification.

Psyber-Implant

(Proscribed)
Category: Cybernetic Device
Tech Level: 7
Firebird cost (by type): High Tech = 2500; Mech = 1500; Think Machine = 3000; Volt = 2000 (+2000 for pineal surgery)
Benefice cost: 15
Cybertraits (1): Concealed, Tech Level 8, Expert Tech

Tetsuo "Ace" Jenner, who had since been immortalized as a pop icon, a fearless evolutionary pioneer, children's adventure story hero and beloved spokesman for Rockhardt Enterprises, undergoing a tortuous 13-hour cranial vivisection. Faced with this and other massive civil rights suits from workers and test subjects, the Rockhardt arms merchants were forced to liquidate their assets.

The true Psyber-implant was developed not long afterward by PsyberNet X, an interdisciplinary technologies coalition specializing in cybernetic medical prostheses and "alternatively abling" the handicapped. The implant became a genuine conduit linking man-mind with machine-mind. Some examples of PsyberNet X's successes from this period include surviving recordings of the Limbless Orchestra, the paintings of the Blind School and the heady romances of Zeenat Helen Saint-Trungpa, who, though imprisoned in a blasted cinder of a body by a stardrive core overcharge, nonetheless was able to publish over twenty-five novels a year by telepathically dictating them to her word processor.

Since the Fall, Psyber-implants have mainly been the domain of the Engineer's Guild, who have developed highly specialized applications for psychic scientists and technicians. The intimate rapport that these gifted individuals share with their instruments tends to have an unnerving effect upon the populace at large, and is at the root of many antitech superstitions. Outside of the Guilds, however, the primary source for Psyber-implant technology is once again the weapons merchants, and the majority of implants likely to be encountered outside of a high-tech environment are gunslingers and assassins telekinetically wielding Bonded weapons.

Psyber-Implant Types and Psi Paths

Below are some examples of how the different psychic paths can affect various types of tech. Note that the path of Omen is not included, as it has no direct application with regard to the Psyber-implant.

The range and duration for most powers are the same as their usual psychic versions, except for the Soma path, which requires that the implantee touch the machine she is affecting (unless additional Wyrd points are spent to extend the range).

Slug guns, powered armor and Diaspora-era starships are all covered by the Mech type implant (generally TL5 or less), while energy weapons, shields and advanced starships from the Second Republic should be considered High Tech (TL7+).

• **FarHand** (Tech + Tech Redemption, Drive or combat skill)

Telekinetic manipulation can be useful with every conceivable form of technology, but the most common applications involve the Mech type implant.

• Lifting Hand (Level One) may be used to make a tool, device or weapon instantly leap into the implantee's hand. Bonded objects may be "called to hand" even when their exact whereabouts are not known (useful when rummaging through a disorganized toolbox or retrieving one's blaster from a pile of confiscated weapons.) In combat, this is the equivalent of adding the implant bonus to Initiative (at the gamemaster's discretion), a Draw-and-Strike maneuver (with melee weapons) or Quick Draw (with firearms).

• Throwing Hand (Level Two) may be used to guide thrown or slung missiles (but not firearm projectiles). The gamemaster may assign a penalty for extreme uses of this power. (Throwing a dart around a right angle corner, for example, is a Demanding task.)

• Crushing Hand (level three) may be used to steady a weapon for precision strikes. The implant bonus can be added to the maneuvers Athletic Strike, Pierce or Snapshot.

• Dueling Hand (level four) may be used to operate any single handheld device from a distance.

• FarArms (level five) may be used to drive a land- or watercraft without touching the controls. (This does not apply to Beastcraft.) The implantee need not be on board the craft if she is familiar with its type, but must have a clear view of the road or surrounding terrain. When wresting control of a craft from the normal driver, the gamemaster may require contested rolls. (Drive skill required; Mech/Volt Redemption required for bypassing controls)

• FarWall (level six) may be used with a Volt implant to conduct electrical current without wires or cables. Range is normally touch (as the psychic is conducting the current through her own body without damage or shock), but may be increased with Wyrd points to sensory (and beyond, with an appropriate Sixth Sense power.) The gamemaster may require an additional targeting roll (Extrovert + Shoot) if this "lightning bolt" is to be projected accurately toward, say, a receptor socket or an enemy's weapon. Complex modulations of electrical current such as audio, video or think machine signals will be hopelessly scrambled unless level 3 of either Sixth Sense or Psyche (see below) can be applied also. (Volt Redemption skill required.)

• AirStride (level seven) allows the Psyber-psychic to pilot any aircraft with which he is familiar, without touching the controls. The psychic must be on board the craft and have a clear view. (Drive Aircraft skill required.)

• HandShock (level eight) enables the Psyber-psychic with a Volt implant to actually generate electrical energy within his body, transforming him into a walking battery. This current can be transferred to conductive materials simply by touch, or can be projected short distances via FarWall (level 6, above). (Volt Redemption skill required if used to power electrical equipment.)

• AirDance (level nine) may be used to remotely pilot an aircraft. Since maintaining visual contact is a problem in the remote control of far-ranging vehicles, most implantees with this power also use Sixth Sense level 5 (below) with Bonded cameras mounted on the craft.

· Psyche (Tech + Think Machine)

The path of telepathy may only be applied to think machines or golems, because they are the only type of technology that possesses any sort of rudimentary "mind." Communicating with most think machines is a simple, straightforward affair not unlike conversing with a small child; linking minds with a large data library, an expert navigation system or an artificial intelligence, on the other hand, can be overwhelming, necessitating some Wits rolls to keep the psychic from losing herself in the vast and complex info-environment. A common pitfall, as with normal telepathy, is the language barrier; the psychic must be familiar with the targeted computer's programming language in order to operate effectively (see Chapter Three: Man and Machine).

An implantee's presence in a computer system cannot be detected through conventional security programs, but only by another implantee currently targeting the same system. Artificial Intelligences can resist psychic probing with Wits (Tech Level 7) or their best Spirit characteristic (Tech Level 8).

· MindSight (level three) enables an implantee to perceive all the normal functions of an active computer terminal; i.e., read open files, follow the processes of an application in use, see what is being accessed and how, etc. This does not allow the psychic to see files which have not been opened, protected or encrypted information, embedded subroutines or viruses. No action may be taken like ac-

cessing files or entering commands or data unless the psychic can physically operate the terminal itself in the usual manner.

· MindSpeech (level four) allows a psychic to take actions on a terminal with which she is "telepathically" linked. Normal functions like viewing menus, opening files, accessing applications and entering data are allowable unless access is denied by security, encryption or other safeguards.

· HeadShackle (level six) empowers the psychic to override any single function currently in action, issuing a number of commands equal to his victory points plus one. The gamemaster may assume that good security software requires at least a dozen such overrides (passwords, codes, etc.) to overcome. This power may be used in addition to, or instead of, conventional "hacking" methods. (Science: Think Machine)

· BrainBlast (level seven) can be used to crash any operating system targeted through MindSight. The gamemaster may make this a sustained action for larger systems, such as starship think machines. The victory points on this roll equal the number of spans before the system can be brought back on line.

· Sympaticus (level eight) allows an implantee to transfer data between multiple target systems, be they other think machines or human minds. If the targeted receiver is a person who does not possess an internal think machine, the implantee must make sustained Wits + Science:

Think Machine rolls to translate any appreciable quantity of information to be "downloaded" (the number of victory points required depends on the amount of information).

· Puppetry (level nine) empowers the implantee to issue any sort of system override command or rewrite any program in the targeted system, giving her total control over the system. This does not grant total knowledge of that system, however, which must be explored over time. (A Tech Level 7 AI can be unraveled in under a year.) Mucking about in a complex and unfamiliar system can bring wildly unexpected results (gamemaster's discretion.)

· **Sixth Sense** (Tech + Observe)

Extrasensory perception acts entirely through the Volt implant, giving the psychic the power to perceive, intercept and manipulate the electrical "sensory" impulses of the mechanical world.

· DarkSense (level two) allows one to see electrical current, even through light insulation, a valuable tool in diagnosing faulty electrical systems or figuring out how an unknown device works.

· Subtle Sight (level three) can be used to actually read a complex electrical signal, such as sound or video feeds; the psychic must physically touch the wire carrying the signal, and, when attempting to receive radio wave transmissions, must be in physical contact with a suitable antenna.

· FarSight (level five) establishes a remote video feed from any electrically operated target camera, enabling the psychic to see through its lens. This feed is psychic in nature and does not interfere with the camera's normal functioning.

· FarSound (level six) allows for a remote audio feed from any microphone or electrical sound source, as with FarSight, above. Both of these powers can also be used in conjunction with other powers to target a person or thing through a radio or video link. (For instance, reading the aura of someone on live television, or scanning the mind behind the voice coming out of the Squawker.)

· Shared Sense (level seven) transforms the implantee into a human transceiver capable of tuning into any type of broadcast communication signal and transmitting it to bonded targets. At this level no antenna is necessary to receive radio waves. The psychic may also broadcast mental sounds in the form of radio waves, making him a walking Squawker.

· SenseShock (level nine) allows the psychic to broadcast a mental image or short visual sequence in the form of radio waves. Alternately, this power may be used to overload a circuit; the amount of victory points required varies with size and Quality modifier.

· **Soma** (Tech + Vigor)

The lower levels of the path of bodily control can be applied to any type of tech, but the upper levels generally concern themselves with High Tech, and energy fields in particular. The Psyber-psychic must either be within the energy field radius, or must touch the field's generator or controls, or the field surface itself.

· Toughening (level one) can be used to assist a device, vehicle or weapon which is operating in extremely adverse conditions or at the limit of its performance capacity. The implantee's victory points offset any negative modifiers but do not add positive modifiers.

· Strengthening (level two) enables a machine to increase its power capacity, allowing vehicles to travel faster, construction machines to lift heavier loads, or an energy shield to raise its maximum rating by an amount equal to the victory points on the activation roll (usually lasts for one span per roll).

· Quickening (level three) allows a machine to operate with greater precision and speed, improving the maneuverability of a vehicle or the accuracy of a long range weapon. The implantee's victory points act as positive modifiers to such rolls.

· Hardening (level four) helps tech resist direct physical damage, whether it comes from a jarring impact, internal power overloads or, in the case of Bonded items, yearly wear and tear. The implantee's victory points act as armor dice.

· Sizing (level five) enables a psychic to expand or contract any contained energy field, such as a shield. Each victory point extends or withdraws the field radius by one quarter of its present length; one point would be needed to expand a dueling shield to assault shield size, and two to expand it to battle size, while four makes room for a whole other person. Each increment of expansion reduces a shield's maximum rating by one.

· Masking (level six) allows the shaping of an energy field into any specially sculpted shape. Severe distortions of a shield's surface area can cause unhealthy fluctuations in its minimum/maximum ratings. This allows a personal energy shield to be attached to nonhuman objects, such as cars or doors.

· Recovering (level seven) enables a machine to self-repair most basic physical damage or temporary malfunctions it has suffered, such as cracking, metal fatigue, locked gears, jams and misfires, or corrosion. The gamemaster may rule that thoroughly demolished parts or components must be replaced normally. The implantee's victory points regenerate the object's Vitality (and may improve the object's Quality modifier; gamemaster's discretion).

· Slowing (level eight) helps a machine run at peak energy efficiency, and can be used to increase the hours of life in a fusion cell, the mileage in a tank of fuel, the number of shots in a blaster's charge or the number of hits an energy shield can take (all by amounts equal to the implantee's victory points.)

· Closing (level nine) allows for the extreme fine tuning of an energy field, like adjusting it to filter out specified gases or types of energy, reconfiguring its design and purpose, or lowering the minimum rating of a shield (one point per victory point).

Theurgic Relic
The Looking Glass of Saint Athanaseus

Tech Level: N/A
Firebird cost: 5,000 reward for its return
Benefice cost: 15

The Looking Glass of Saint Athanaseus is a sturdy old silver-plate mirror (1m x 1.5m) of the type favored by agrarian colonists, braced inside of a rough-hewn oak frame which is more utilitarian than decorative.

The Looking Glass reflects the internal state of the viewer, after the fashion of the level 3 Eskatonic ritual Rending the Veil of Unreason. The appearance of the mirror's surface changes according to the sinful ways of the person looking into it. (The mirror itself does not change; all streaks, cracks, etc. are illusory, but are visible to anyone else present.) It can also illuminate Urges, demons and other occult presences as per the level 4 Eskatonic ritual Second Sight.

If one devotes one's time to studying one's image in the Looking Glass of Saint Athanaseus, one may activate the most powerful ritual contained in this holy relic, the Righteous Assignation of Penance (level 7). The viewer is presented with a veritable diagram of the sins which gnaw at his soul, and through prayer develops an intuitive un-

derstanding of what is required of him in atonement. The penance dispensed by the Looking Glass is never anything superficial, but usually involves an arduous quest or life-long obligation. Theurges or psychics invoking this aspect of the relic may receive +2 to resolve their Hubris or Urge conflicts.

The Looking Glass of Saint Athanaseus may activate spontaneously whenever someone looks into it, but characters voluntarily calling on its powers must utter a prayer for Saint Athanaseus and roll Faith (or Theurgy) + Observe. Activating the Righteous Assignation of Penance is a sustained action requiring either a full day before the mirror or daily one hour sessions for over a week. One Wyrd point must be sacrificed for each ritual activated.

History: Father Athanaseus was a Hesychast hermit of old Grange (now called Pandemonium) renowned for his special insight into the complexities of the humanoid soul. By the time of his death, about two hundred years before Grange's "rediscovery" by Count Vanos Juandaastas, Athanaseus was called "Father Confessor to the World," for pilgrims from all over the planet sought him out for spiritual guidance. A privileged few were allowed to sit before his great mirror, gazing into themselves while Athanaseus gently massaged sin and corruption from the dark corners of their soul with his understanding and wise words. He taught, "By looking in a mirror, we can see ourselves as others see us; by examining ourselves inside and out, we can begin to see ourselves as the Pancreator sees us, whole and exposed without pretense. How better to learn how best to reflect the celestial glory, than by reflecting upon ourselves!"

When the jumproad to Grange was reestablished, the local cult of Athanaseus successfully petitioned the Church for his canonization. His looking glass was eventually enshrined in a hastily finished niche in the Cathedral in the Badlands, where it was venerated by faithful visitors until very recently, when it was stolen by persons unknown who entered the cathedral as pilgrims. The Church is offering a reward of 5,000 firebirds if it is recovered intact.

Strange Drug
Zhrii-ka'a

(Vau translation unknown; a.k.a. "lotus juice," "psi-key," "eye-openers," or "shriekers")
(Proscribed by the Church)

Tech Level: 2 (to make tincture)/ 6 (to make extract)/ 7 (to artificially maintain a living lotus plant)
Firebird cost: 1 per bottle of tincture or 25 mg dose of extract/ 100 for a living lotus plant
Benefice cost: 7 (for a consistent supplier of tincture)/ 12 (for extract dealer)/ 20 (for a living lotus plant)

This exotic vegetable oil contains a unique chemical once known to Second Republic psychopharmacologists as G-metapolyphtheratripineatide-73, or G-MPP-73, which

mimics an unknown neuropeptide in most humanoid brains. Once in the brain, G-MPP-73 increases electrical conductivity, floods certain specific areas with serotonin and tryptamines, and directly stimulates the pineal gland.

Lotus juice is available in two forms, tincture and extract. Tincture is made by soaking crushed lotus in an alcohol solution which bonds with G-MPP-73. Extract is taken from the lotus by complex processes requiring a Second Republic chemistry laboratory (or its equivalent) to perform.

Extract in its pure state is a white granular powder, and is usually dissolved in a water solution. Seasoned "lotus eaters" prefer the extract, both because of its purity and the ease with which it can be measured into reliable dosages. A regular dose is around 25 micrograms of pure extract, equal to one drop of extract solution.

In low level doses of 25 micrograms or less, this drug produces mild hallucinations and occasionally disorienting alterations in perception, not unlike the primitive "psychedelics" of pre-Diasporan Urth.

At 50 mgs, the perceptual floodgates are flung wide open, inundating the brain with vastly increased sensory input and overloading its ability to selectively pay attention to some perceptions and ignore others. This state is functionally identical to the Sixth Sense power Sensitivity, but, due to the overload effect, the gamemaster should not allow the character under the influence to use the +3 Perception modifier unless a) the character is already a psychic with the Sensitivity power — in which case the power is considered automatically active (at no Wyrd cost) for the duration of the drug's effect (thus rendering the psychic vulnerable to bright lights, loud noises, a pummeling, etc.); b) the character has been trained in advanced meditative techniques, such as those taught by the Eskatonic Order and most covens, and makes a Wits + Focus (or Stoic Mind) roll; or c) the character is an experienced "lotus eater."

The 100 mg dose is the threshold for total pineal stimulation and the manifestation of Psi energies. A non-psychic or an untrained psychic in this state is subject to more severe hallucinations which nearly always contain some important element of truth within them, usually in a symbolic form that may require some interpretation, as with dreams. A trained psychic in this state does not hallucinate, but gets a +1 modifier to all Psi rolls, with an additional +1 per additional 100 mgs. This modifier applies to Urge rolls as well.

As dosage is increased to 250 mgs, the hallucinations of non-psychics may become clearer and more direct, less open to interpretation and even merging with full-blown visions, premonitions, or clairvoyant or telepathic flashes. Rare instances of telekinetic "poltergeist" activity are known to occur as well.

500 mgs is considered the overdose threshold; at this point the blood vessels around the pineal gland are so engorged as to constrict bloodflow to other parts of the brain, resulting in stroke and other brain damage. For each hour that a character is under the influence of 500 mgs or more, the gamemaster should have them roll Endurance + Vigor, with a -1 penalty for each additional 100 mgs over 500. Failure means that the gamemaster must choose one characteristic to be permanently reduced by an amount equal to one plus the penalty on the roll.

Dosages of 700 mgs or more have been known to spontaneously awaken Psi power in non-psychics (those that survive the overdose threshold). As with the sensory overload effect, advanced mental training is necessary to keep the new power under control. Without such precautions, and sometimes in spite of them, fledgling psychics tend to go quickly insane, their minds torn apart by their wild new talent. If a character survives this state but fails a roll of Ego (or Faith, whichever is primary) + Focus (or Stoic Mind), she will develop a neurosis or even a psychosis. The player and gamemaster should work out the details.

A dose of 1000 mgs or more invariably ends with demonic possession. Or so the Church will tell you, and there is plenty of hard evidence in their exorcists' casefiles to prove it. The lotus eating cults of Manitou, however, explain that this absolute degree of lotus consciousness peels back all the outer layers of the personality like flower petals, exposing the innermost core of the psyche to the open air, as it were. Like most pantheistic pagans, the lotus eaters recognize a wide variety of common spiritual beings which could affect a humanoid in this vulnerable state, for both good or ill. But the wisest lotus eaters all agree that no demon can resist the sweet seductive aroma of a freshly everted soul.

History: Early guild colonists on the planet Manitou found themselves in a veritable paradise of beautiful and exotic flora, foliage that seemed to speak directly to the innate human love of green growing things. Of all these floral wonders, none caught the imaginations of the humans up in its spell like the beautifully iridescent Zhrii-ka'a, or Jewel-Eye Lotus. The planet's Vau protectors forbade the harvest of the lotus, hinting that it contained a power too great for humans in their present state of development to wield responsibly.

But, from deep within its natural habitat in the mistswamps, the Zhrii-ka'a sent forth sweetly scented dreams to the human mind, rising up on its stalk out of the mists of unconsciousness and unfurling its petal-lids, rolling its single sparkling "eye" to gaze upon the soul of man with the canny, knowing look of a peer. Or a friend.

So, naturally, someone eventually had to grind one up and eat it. Just to see.

A great deal of folklore has since sprung up around this pioneering act by an unnamed colonist. Church history maintains that she was a lost traveler who had wandered into the swamp unwittingly, and, after several days of gradual starvation and aimless searching for a way out, finally fell upon a lotus and devoured it in hunger and desperation. Instantly her soul was ripped open and laid

bare, and every manner of evil swooped down from the darkness between the stars and made its nest in her heart. From that point on she was a tortured madwoman, and her raving and howling can still be heard in the mistswamp when there is no moon in the sky. The stories one hears in the lotus eater subculture, however, tell quite a different tale. In these versions she was a skilled and driven ethnobotanist as well as a fearless neuronautical explorer; her discovery of the lotus's unique properties was no accident, but the result of careful and systematic exploration and experimentation.

In either case, while the name of this person may be lost to history, her legacy of the lotus has thrived, even in its dwindling native environment where it is lovingly cultivated by a coalition of local lotus eating covens. Safe from the Inquisition and only nominally policed by the Vau, the lotus eaters are pantheistic nature worshipping cult who regard the Zhrii-ka'a as a living sacrament, to be nurtured and cultivated with respect and profound ceremony. There are, however, fringe elements associated with the cult who occasionally manage to smuggle seeds and even dried plants to blackmarket chemical labs outside of Manitou. Most canny observers agree that the Vau allow the lotus eaters to practice in order to study the effects of Zhrii-ka'a on humans, but the complete disappearance of smugglers caught by the Vau (not to mention the horrific rumors surrounding each disappearance) makes it clear that the Vau never intended to let the power of Zhrii-ka'a loose in the Known Worlds.

Buying Tincture

Tincture is usually stocked by Charioteer medicine shows, whose brightly-colored one dose bottles are referred to as "a specialty item — ask 'round back after the show..." The strength and quality of tincture varies widely, which makes taking large doses in this form a risky proposition. When a player character buys tincture, the gamemaster should roll a d20; this roll determines the potency of the tincture as compared to an equivalent dosage of extract. The gamemaster may decide (secretly, even!) whether to apply this roll to all bottles in a batch, or to roll individually for each one. Tincture potency may be determined with the spectroanalyzer from a NanoTech MedPak and a successful Tech + Chemistry Science roll.

Roll	Potency
1-4	25 mgs or less
5-12	25-50 mgs
13-17	50-100 mgs
18	100-500 mgs (roll again: divide by four rounding up and multiply by 100)
19	500-1000 mgs (roll again: divide by four rounding up and multiply by 100, then add 500)
20	1000+ mgs

Though there are very few ecosystems outside of Manitou that will support this delicate species, the Jewel-Eye Lotus can be found in the great hydroponic corridors of the Academy Interatta, as well as some private hothouses run by freethinking libertine nobles. Rumor tends to link the least reputable members of House Decados with the blackmarket lotus juice trade, but little has ever been proven. Nearly all worldly and decadent noble youth have either experimented with tincture or know someone who has; mock "lotus eater" cults enjoy frequent revivals among the young and affluent, usually in the wake of a Charioteer medicine show featuring some popular minstrel ensemble facing charges of pagan heresy from the Church.

Some psychic teachers who can be contacted through the Favyana use carefully controlled amounts of extract as part of their training program; most will sell small quantities of extract to psychics whom they know and respect, but may be willing to part with more if they are in desperate need of firebirds or have heard that the Inquisition is heading their way.

Much extract traffic is controlled by certain cells of the Invisible Path, who consider it an evolutionary crucible which burns away the terminally unenlightened and spares the truly gifted ones. Young ambitious members of the Path favor the drug's power boost when challenging their elders to leadership duels.

Ur Artifacts
The Eye of Mihanoom
(Proscribed)
Category: Soul Shard
Tech Level: 9
Firebird cost: NOT FOR SALE!
Benefice cost: N/A

The Eye of Mihanoom is a perfectly formed sphere, approximately half a meter in diameter, with a murky interior full of slowly shifting clouds of muted colors, which part to reveal visions to its user. This Soul Shard is attuned to the psychic path Sixth Sense (+2 to all goal rolls using that path, with extra range purchased at one point less than the regular Wyrd cost) and can hold up to 30 Wyrd points. The Eye has also been known to spontaneously grant glimpses of the past or future to random individuals, as per the path Omen.

History: The Eye of Mihanoom was originally believed to belong to the Witch-Mother Mihanoom, a patron goddess of the Etyri of Grail. Their myths stated that Mihanoom, who ruled the world from her throne-perch atop what is now Mount Chur'reesh (the site of Preadamite ruins), gave up one of her eyes in exchange for "true and complete knowledge of all times and places." The powers with whom she was dealing (presumably the Anunnaki) granted her this Soul Shard as its replacement.

The Eye is now in the care of a Etyri coven which meets on Mt. Chur'reesh when both moons are full.

Soulsucker

(Proscribed)

Category: Philosopher's Stone
Tech Level: 9
Firebird cost: NOT FOR SALE!
Benefice cost: N/A

The Soulsucker is one of the most unusual objects one could ever see: a tentacled body, half a meter in length and covered with exotic circuitry, buttons, knobs and scalloped vents, framed by two bony handles, with two jointed antennae reaching overhead and a flexible eyestalk dangling below. Viewing the Soulsucker with WyrdSight shows a fully developed, though completely unreadable aura, as if the artifact had a sentient personality of its own. Its queer blend of technological and organic features has prompted the superstitious to attribute it to the Symbiots, but its discovery predates any contact between humanity and the shapeshifters, and the incredible powers of the thing point directly to the Anunnaki.

In short, the Soulsucker is the most powerful brainwashing tool in existence. Used properly, it is capable of "reprogramming" every conceivable aspect of a sentient creature's personality, from its most superficial habits to its most deeply bred instincts. Dissolving and penetrating the boundaries of the ego, it lays bare the subject's innermost identity, allowing the psyche to be picked apart and put back together like a clockwork toy. Emotional responses may be adjusted in intensity or dismantled and reattached to entirely different stimuli; cognitive processes may be "rewired" or disabled, and memories may be rewritten or erased completely.

When in use, the Soulsucker's tentacles stretch out to embrace the subject's cranium and reach down the spinal column, seeking out nervous ganglia and plexi, while its broad flat antennae scan the subject's bioelectrical aura. An eyestalk on the artifact's underside will attempt to enter the cranium through the largest orifice in the subject's face (the mouth in most Known Worlds species).

This Philosopher's Stone is extremely difficult to operate because of its alien design and the nature of its function. The two oversized handles were never intended for humanoid hands; the placements of their various triggers, buttons, switches and slide controls are too awkward for even the four handed Vorox. At least three people are required for effective operation: two assistants to manipulate each handle while a third person directs the operation and works the remaining controls. Even then, the device must be mounted upon a stand, rack or boom.

Overcoming these physical difficulties is the easy part, however. The director can have no idea what the thing is actually doing inside the subject's head unless some form of mental contact is maintained. Gross, simple operations like emotional adjustments, thought blocks or broad memory wipes can be accomplished with Intuit or Subtle Sight. More detailed operations, such as the rerouting of thought and emotion, require Mindsight or Shared Sense

(with a Bonded, and usually willing, subject). Rewriting memories or implanting knowledge and information requires MindSpeech. Learned skills may be implanted in a subject provided the director possesses the skill at two levels higher than the level to be implanted. Changes in a subject's psyche will begin to fade after a year unless reinforced by repeated sessions or the expenditure of Wyrd points by the director. (1W = one additional year)

History: The Soulsucker was discovered among the Ur ruins of Bannockburn in 3758, and was immediately sent to the Phavian Institute for study. Over the next century, some of its nature and purpose were gradually divined by cautious and carefully controlled experimentation, eventually becoming the object of obsession by the Director of Xenotechnological Research, Doctor Yosef Monjali, a highly driven professional with some rudimentary psychic ability.

Monjali realized that the full potential of the artifact could never be determined as long as research was restricted by the scarcity of volunteer test subjects and Republican laws prohibiting inhumane research methods. Absconding with the Soulsucker, Dr. Monjali set up shop on a frontier world whose totalitarian rulers kept many dark secrets from Second Republic authorities. There, free from societal constraints, the true range of the Soulsucker's power was revealed.

It is believed by some that the Soulsucker played a part in the computer sabotage that led to the collapse of the Republican welfare system, and, consequently, to the Fall. Second Republic security was no joke, and it seems likely that the saboteur was a technician or administrator rather than an intruder (the system was shielded against Psyberimplant tampering). Conspiracy theorists maintain that the Soulsucker must have been used to brainwash a civil employee into destroying the welfare information network. These same pundits claim that the artifact was deployed in the assassination of Vladimir, but opinions as to exactly what role it played vary widely, and anyone's guess is as good as anyone else's.

At some point in the intervening centuries, the Soulsucker fell into the hands of the Invisible Path, and some even theorize that the Path itself began with Monjali or his successors. The Path's possession of the artifact came to light when they attempted to assassinate Emperor Alexius on Tethys in 4995. The blade which passed within a centimeter of Alexius' throat was wielded by Sir Phileas Alderstaff, a childhood friend and longtime drinking buddy of the new Emperor. Folklore states that the only time a tear was seen in Alexius' eye was when he signed the execution order for his lifelong companion-in-arms.

The newly formed Imperial Eye was not content to let the matter rest, however; Alderstaff's loyalty to House Hawkwood and his love for Alexius had always been beyond question. Sir Phileas appeared to be fully cognizant of his action but unable to stop himself, and spent his brief imprisonment composing tearstained apologies to his old

friend and exhausted himself in prayer, penance and confession. Close interrogation by the Eye could not reveal any conceivable motive for the attack, but did disclose a short but distinct memory gap in Alderstaff's recollection of the week before the attempt.

A team of investigative specialists, led by the young but brilliant telepath Lieutenant Juana Nkrumah, retraced Alderstaff's movements for the previous week and learned that he had been kidnapped for the space of several hours, and reappeared without any awareness of the event. In a daring commando raid, Lt. Nkrumah ferreted out the Invisible Path cell responsible and brought them to justice alive, capturing the Soulsucker in the process. After the Imperial Eye's tortuous mental probing of the prisoners, Alexius slew each one in turn with his own hand, a lingering Imperial execution that was neither swift nor merciful.

The Soulsucker is now kept in a sealed vault on Tethys, guarded by the ever vigilant eye of now-Captain Nkrumah. An Imperial edict has been issued, to the effect that no expense is to be spared in the pursuit of the Invisible Path. Captured members of the Path have reason to fear that the ancient and powerful artifact which served them for so many centuries could well be turned against them. Members who have even been rumored to have been arrested are often killed outright by their fellows.

Kraken Ward

Category: Gargoyle
Tech Level: 10
Firebird cost: NOT FOR SALE!
Benefice cost: N/A

A long sleek crouching form, as black as deepest space, the Kraken Ward is about twelve meters long, seven wide and five tall. In overall shape it combines aspects of a Vuldrok bullhound, a Vau gift-mantis and a Chernobog swampcrawler, but the details of its anatomy resemble nothing found in the Known Worlds or OtherSpace. Shaped from a viscous looking black glassy substance, its outer surfaces are scored and pitted with millennia of space debris erosion, but some patches retain enough of its original luster to reflect dark and disturbing visions for psychics, pilgrims and anyone else who looks too closely.

The Kraken Ward has a power level of 7, meaning that Urge and Hubris effects of 7 or lower are negated in its presence. The exact nature of the Kraken Ward's powers are pretty much up to the gamemaster, but some hints may be derived from its history; ships bearing this gargoyle upon their prow tend to survive unbelievable danger relatively intact, so protection is definitely within its purview. Perhaps it actually generates a force field around its ship, providing a degree of damage resistance based on the collective Spirit traits of the crew. Ships that have been disabled tend to drift into orbit around the nearest planet, space station or into a more frequently patrolled sector, improving chances of rescue. Visions granted by the gar-

goyle are always interstellar in scope, revealing empire-shaking events on distant worlds which later intersect the viewer's destiny in bizarre ways. (This may be equated with FarSight and certain powers of the Omen path.)

Scanning the Kraken Ward with Wyrd Sight or Second Sight shows it at the convergence point of vast quasimagnetic fields which stretch out to infinity and, on a critical roll, may be seen to radiate from the nearest jumpgate and all the closest celestial bodies. A third-eye-like hemisphere atop the cranium can be seen to possess the power Premonition, always active, and will glow red in the presence of peril (only visible through Wyrd vision).

In any case, this gargoyle should be a magnet for trouble. While it is famous for being the last one out as the jaws of doom snap shut, it has an equally strong urge to be the first to fly into those selfsame jaws. Its presence planetside will cause every hero, villain and lunatic around to come crawling out of the woodwork, regardless of whether anybody knows it is there or not. Characters who travel with the Kraken Ward can ultimately have only one destination: adventure!

History: The ancient and fearsome effigy which would come to be known as the Kraken Ward was unearthed on the planet Cadavus during the height of the Emperor Wars, when Houses Decados and al-Malik were locked in a bitter struggle for control of that world. At this time, the Decados presence on the planet had been reduced to a small, heavily fortified region whose borders were under near constant bombardment from al-Malik artillery. After an especially heavy volley, Decados scouts discerned a strange alien profile jutting unharmed from one scorched and blasted crater. The commandant of the region, one Georgi Szulkalsk Decados, ordered that the thing be excavated and retrieved, heedless of the number of sappers lost on the job in subsequent al-Malik barrages.

An educated man (by Decados standards), Szulkalsk had some grasp of the importance of the artifact now in his possession. Reading a favorable omen in its chance uncovering, he had it mounted on the prow of one of his few remaining starships and began a desperate run to the Cadavus jumpgate in the hope of rallying reinforcements from Severus or Malignatius. A breakneck chase through the star system ensued, climaxing when two al-Malik cruisers were able, thanks to their superior stardrives, to cut off Szukalsk's approach to the gate, forcing him to veer off into deep space. Because few ships ever return from the deep space beyond a jumpgate's orbit, the cruisers decided they had seen the last of the Decados and returned to Cadavus to help crush whatever resistance remained on the planet.

Some time later, when Decados forces arrived to retake the world, the al-Malik fleet had little trouble holding off the invaders until they suffered a minor but completely unexpected attack on their rear flank — none other than Georgi Szulkalsk Decados! Although they had the stronger position, the al-Malik were so astounded and

demoralized by his return from the grave of deep space that House Decados was able to reclaim Cadavus as their own.

In years to come, Szulkalsk would name the gargoyle KrakenWard, convinced that it had protected his vessel from the Void Krakens lurking in interstellar space. The gargoyle has come to occupy a central place in legendry and folklore, much of it due to Szukalsk's own tall tales regarding the thing's history. He claims that it was removed from the dark side of Urth's jumpgate and mounted on the prow of first ship to jump to Sathra's Boon. (There is indeed an empty space on the Urthish gate, but what originally occupied it, none can say.) Szulkalsk has the KrakenWard on the prow of the ship that first contacted the Shantor, on the ship that took Zebulon to the lost frontier world in 2723 for his Empyrean vision, on the ship that first contacted the G'nesh and the Vau, on Benjamin Verden's ship and the few others allowed to return from Vau space, on the only ship to escape the Ukar attack on Criticorum and on Patriarch Palamedes' ship for the Ukar's later defeat. Due to the Decados' spotty historical education, the KrakenWard seems to have been strangely dormant during the Second Republic; if pressed, Szulkalsk will explain that it was kept in "some laboratory somewhere." However he is quick to restore the artifact to its "rightful place" in pseudohistory, placing it on the flagship of the Ten Houses fleet that retook Byzantium Secundus, on a battleship defending Delphi from the Vuldrok incursions, and on Vladimir's flagship beating back Vuldrok. While Szulkalsk may wax quite voluble on this spurious history, he is of course unable to document his claims, and may fly into an indignant rage if questioned too closely.

VauTech

Note: The following Vau words are based on the "phonetic" alphabet developed by Benjamen Verden, first diplomat to the Vau. The system is based on a faulty understanding of the language, but still represents the best method available for apprehending Vau pronunciation through human throats.

Halsh'Rumu Tla'a

(lit. "silent chorus of light;" Urthish slang "lightsplinter")
Category: Utility
Tech Level: 7
Firebird cost: 10 – 25
Benefice cost: 2

This crystal shard has been electromagnetically treated by the Vau so as to destabilize its internal geometry in such a way that it generates light from energy received as vibrations. A soft tap on a lightsplinter will cause it to glow briefly, while vigorously rubbing or shaking a 'splinter creates a brighter and more prolonged glow. A sharp impact will produce a bright flash, and shattering one tends to blind everyone nearby for three turns. A

'splinter is good for approximately 500 hours of continuous use before its destabilized geometry collapses into something resembling common quartz.

History: The Halsh'Rumu Tla'a is the most commonly found VauTech import in the Known Worlds, not as widely used as the fusion torch but still in demand by specialized industrial concerns and as a novelty item. Sizes range from the minuscule "thumb torch" costing only one firebird and a portable searchlight for five, to industrial strength spotlights and ship's running lights costing up to twenty 'birds.

The Halsh'Rumu Tla'a is rarely sold retail without some sort of casing designed for its intended purpose, whether a simple handle or a control housing made to fit into a regular electrical light socket. Most lightsplinter handles and housings incorporate a scraping or abrading attachment calibrated to generate the longest possible period of steady light at the most favorable brightness level. 'Splinters are often found mounted on machinery or vehicles which sustain a continuous vibration to power the light.

Numunanth Ofleed'hansth

(lit. "sheath of radiant glory in purpose;" Urthish slang "SmartRobe")

(Proscribed by the Church)

Category: Garment/Prosthesis
Tech Level: 8
Firebird cost: 20,000+
Benefice cost: 20+

The SmartRobe is a contained energy field micromodulated by a very compact VauTech nanocrystal brain which controls all aspects of the field in discreet sectors, meaning that different parts of the field can be transformed without affecting other parts. The external surface of the field can "solidify" to form the "robe" proper, with regulated shapes, colors and textures formed from variations in the field's surface tension and vibratory frequency. A SmartRobe can take almost any appearance, but its default form is that of a long robe of billowing grayish fabric, with a broad rigid shoulder covering, similar to most Vau mandarin fashions.

SmartRobes are created with rudimentary "reflexes" and "instincts" which allow it to instantly conform itself to its wearer, adjusting for unusual alien anatomy, bulky carried equipment and physical handicaps. The real power of the nanocrystal brain lies in its ability to "learn," to adapt itself not only to its wearer but also to a wide variety of environments the wearer may move in regularly. It takes approximately one month for a SmartRobe to familiarize itself with one owner, as well as that owner's home and main work place.

The most basic function of all SmartRobes appears to be assisting the wearer with any physical handicaps or impairments he may suffer; injured or defective limbs which are still capable of some movement can be augmented by the 'Robe's field, up to a maximum Strength

and Dexterity of 5. (Starting with a base of 1 in each, it takes one month of physical therapy to raise either characteristic by one level.) The 'Robe can also immobilize fractures, contouring its field to form anything from a finger splint to a full body cast; the nanocrystal brain may even be programmed with a medical monitoring system which can, among other things, set fractures and dislocations by itself. (The medical program costs 5 additional Benefice points and 1400 firebirds to install; it effectively transforms the SmartRobe into a mobile intensive care unit.) A similar addition is the gravitational suspensor field, which supports and carries a wearer unable to walk. (Benefice cost: +3; Firebird cost: +600)

Sometimes called an "all-pocket coat," the 'Robe's field will "grab" and hold any item placed within its radius, giving it the illusion of having a limitless number of invisible pockets at every possible location. "Pocketed" objects can shift position within the field; an untrained 'Robe will leave an item where it was placed, but may, if heavily loaded, redistribute items to even out their combined weight and bulk. Part of a SmartRobe's training involves learning when and where to eject a frequently used tool for immediate deployment. Objects and weapons with a size rating of L (but not XL) can be concealed within the field. Most 'Robes have a carrying capacity of 100 kg.

The 'Robe is also capable of forming up to four rudimentary limbs to assist its owner in minor ways. These appendages are not under the direct control of the wearer,

but must be trained to perform specific tasks. Each limb costs an additional 3 Benefice points, +300 firebirds, and has a base Strength and Dexterity of 1 (but can be trained up to a maximum of 3).

The nanocrystal brain can be linked to a communication system or a think machine, allowing the 'Robe to function as microphone, earphone and/or loudspeaker, or to form a mobile keyboard and project a holographic monitor screen. (+2 Benefice, +200 'birds for a radio link; +3 Benefice, +500 'birds for a video link; +5 Benefice, +1000 'birds for a think machine link)

The brain can also be reprogrammed to mimic the functions of other specialized suits or armor, such as an energy shield or the Null-Atmosphere Survival, Chameleon or Blur suits. The additional Benefice cost is equal to that of the suit or shield being mimicked; the additional firebird cost is 300 (to increase the power capacity of the field generator and fit it for a larger fusion battery) plus whatever the Engineer's Guild charges for reprogramming a nanocrystal brain (usually about 250).

A major advantage of the SmartRobe is its longer field radius, which means it can be worn over anything less bulky than ceramsteel armor.

History: Humanity saw its first Numunanth Ofleed'hansth when Benjamin Verden brought one back from his diplomatic mission to Vau Space; this 'Robe is still a prized family possession of House Justinian. Over the centuries, a few others trickled in from the Vau territories; it is now estimated that over three dozen SmartRobes are currently in the Known Worlds. Many rarely see use, kept as closely guarded status symbols by nobles, while most others are put to work in the Engineers' and other guilds.

A humorous sidenote in the study of the Numunanth Ofleed'hansth is the tenacity with which it remembers functions it has learned from previous owners, suddenly responding to old stimuli in ways which may be disconcerting and embarrassing to the current wearer. This has given rise to the superstition that SmartRobes retain a conscious loyalty to their previous owner(s) and may even act against the present owner unless "subjugated" in a contest of wills.

During the Second Republic, xenotechnologists figured out how to tamper with the nanocrystal brain that controls the 'Robe, refitting it for a wide variety of unintended functions. Many were reconfigured for specific jobs in special circumstances, such as mining, diving and stardrive engineering. Three found their way to the black market, outfitted for combat and stealth applications; these are especially rare, since the Vau placed an inhibitor circuit in the brain that prevents the 'Robe from being used directly for military purposes. One of these "uninhibited" 'Robes is rumored to have been the decisive factor in the Great Assassins' War on Severus in 4379.

It is generally believed by the Engineers that the SmartRobes found in the Known Worlds are just low level,

degraded versions of what the Vau themselves actually use. Tales circulate of vastly powerful 'Robes incorporating a combat shield, stronger and more dexterous multiple limbs and augmentations of the wearer's natural strength extending into the superhumanoid range.

Eevsu'ud Rumuld'hansth

(lit. "sheath of sealed sustenance in sleep;" Urthish slang "LifeCocoon")
(Proscribed by the Church)
Category: Safety Garment
Tech Level: 8
Firebird cost: 15,000
Benefice cost: 15

The Eevsu'ud Rumuld'hansth, or LifeCocoon, is based upon the same technology as the Numunanth Ofleed'hansth, or SmartRobe, as the xenoetymology of the name suggests. Unlike its less expensive cousin, however, the LifeCocoon is specialized piece of life saving equipment dedicated to a single task. Whenever the wearer suddenly encounters an extreme environmental hazard, such as the depressurization of a starship hull breach, the introduction of poisonous elements into the immediate atmosphere, or excessive radiation, the LifeCocoon expands and envelopes the wearer in an energy shield which is airtight and watertight, opaque to radiation and capable of withstanding tremendous impacts. It is essentially a hard, solid sarcophagus shape which does not conform closely to the wearer's body and is not articulated in any way, so no actions may be taken within an activated 'Cocoon.

Like the SmartRobe, the LifeCocoon takes about a month to attune itself to a new owner; this time is necessary for the nanocrystal brain to assess the physical parameters of the wearer — her anatomical durability, physiological functions, and the optimal environment to sustain life — and determine what exterior conditions are dangerous enough to warrant its activation. Within the Known Worlds, however, this process rarely takes more than a day for a previously owned 'Cocoon, since nearly all humanoids fall within the same basic physiological parameters.

The activated LifeCocoon can provide some fairly sophisticated life support for the person it protects by placing them in a state of suspended animation not unlike cryogenic sleep (but without the complications of freezing and rethawing a living creature). A humanoid in this state needs no food or water, and can survive up to half a standard year on the air trapped in the 'Cocoon. (Wearers working in interplanetary space often fit their 'Cocoons with an additional air supply that can extend this period up to three years; this costs an extra 50 'birds and requires the wearing of a medium sized tank.) A LifeCocoon adrift in open space will generate an electrostatic charge that attracts space dust and small particulate debris, accreting a thick hard shell which can survive the heat of atmospheric reentry and the impact of planetfall, asteroids or accidental collision with rescue vessels. All 'Cocoons also incorporate a high power emergency homing beacon to

facilitate quicker rescues (20 AU range).

Once activated, the LifeCocoon can usually be removed only by a crystal key which transmits a complex signal to the 'Cocoon's nanocrystal brain, telling it to deactivate the field. It is possible to program the brain to deactivate the field when certain exterior conditions have been met, like the removal of the hazard or the presence of a breathable atmosphere.

History: The right to market the Eevsu'ud Rumuld'hansth was originally purchased from the Vau by the Charioteer's Guild just before the Fall in exchange for information about jumproads in the outermost regions of the territories now held by the Kurgans and Vuldrok. (Many reactionaries still hold this against the guild even to this day, fearing that the Vau could use this lore to overrun the Known Worlds by waging war on multiple fronts. There is, of course, no hint that the Vau have ever had any such thing in mind. Then again, there is never any hint of anything the Vau have in mind at all...)

Some historical instances which attest to the lifesaving capacity of the Eevsu'ud Rumuld'hansth include the polar explorer Sir Tofnell Horeth, who was rescued after lying for three months in a collapsed ice cavern on Malignatius, and the case of the infamous pirate and cutthroat Aesgrimm Korinkova, brought to trial over a year and a half after his ship, the Bleeding Starbitch, was destroyed by Brother Battle forces in a wild running fight through the Istakhr system.

The LifeCocoon has seen much more widespread use in human space than the SmartRobe, but the Charioteers have struggled to maintain their monopoly on this product. Most 'Cocoons are, or were at one time, owned by starship construction workers and the crews of untested prototype craft. Today, the command crews and very important passengers of many large ships are sometimes outfitted with 'Cocoons, and Charioteers are known to make gifts of the Eevsu'ud Rumuld'hansth to close friends and special clients.

Bafuvupan Dahum

(lit. "dancing partners of the antipodes" (or "poles"); Urthish "repulsor plates")
Category: Utility
Tech Level: 8
Firebird cost: 10,000
Benefice cost: 10

The Bafuvupan Dahum are paired crystalline disks whose ectomagnatomic covalence can be used to generate a repulsion field which pushes them apart from each other. Electricity must be applied to one of the disks to create the field, and the distance they can be pushed apart before the field fades is dependent on the amount of electrical power pumped through them. The strength of the repulsion, as measured by the mass they can lift vertically from the surface of a planet with Urthlike gravity, is de-

pendent on the size of the plates; one square meter is required to lift one metric ton.

The plates must face each other directly to sustain the repulsor field, i.e., the facing surfaces must be parallel and their centers must be in line with each other. (There is some slight margin for error in this: the disks can tilt up to five degrees and the centerlines can stray by as much as one quarter of the disks' radius.) If one plate is knocked out of alignment, the field disappears instantly and cannot be reformed without bringing them back together and starting over.

The Dahum are manufactured in pairs; if one is lost or damaged, the other is useless, since mismatched plates cannot generate the field. (It is rumored that the Vau themselves have overcome this drawback, however.) Second Republic skimmer and artificial gravity technology was based on similar Vau repulsor tech.

History: The first Bafuvupan Dahum in the Known Worlds were found when a derelict Vau starship emerged from the jumpgate at Midian in 2999. The ship, crewless and unbelievably mangled from stem to stern, was found to contain a single intact pair of repulsor plates in the midst of a large damaged shipment. Subsequent inquiries addressed to the Vau gave little clue as to what had happened to the vessel; investigators learned only that it had been missing and believed lost for several centuries. The ship was returned to the Vau, minus the good set of plates.

It took technicians only a few months of experimentation to figure out the purpose of the pair of disks, but nearly half a century to crack the secret of their manufacture. Since then, repulsor plates have been used on most high-tech worlds, usually for elevators in large buildings. They are occasionally used to lift a spacecraft into orbit, but this is a rarity as it requires exceptionally calm skies and a lot of split-second fine maneuvering to keep the plates in alignment as the craft is lifted higher. (Note that the repulsion field cannot propel a craft, just push it out into space where other engines can be fired or a larger ship can intercept it.)

A particularly creative use of this VauTech is the Dean's private "subway" on Leagueheim running in a straight line from the Dean's mansion to the Academy Interatta. It uses two pairs of plates mounted on the ends of the tunnel and the ends of the car; one pair gradually powers up while the other powers down. A regulating circuit in the car keeps the plates at reciprocal power levels and ensures a smooth acceleration and deceleration.

As this VauTech became better understood, many cryptic references in Benjamin Verden's writings were made clearer, such as the "antigravity" vehicles and "frictionless" pushcarts running on crystal-paved floors and roads, the curious "collapsible" buildings and the legendary Floating Gardens of Vau. Many of these wonders later became human realities in the Second Republic.

Symbiot Tech

Rebreather

(Proscribed)
Category: Starship Life Support
Tech Level: 7
Firebird cost: 7000 (+3500 for installation)
Benefice cost: 10

The rebreather is installed in starship ventilation systems to replace costly air filtration units and oxygen tanks. It is a collapsible spongy mass of varying size (depending on the specifications of the starship) containing literally kilometers of tiny interconnected chambers lined with grassy ciliae, enabling it to act as a sort of "vegetable lung" which absorbs the waste gases exuded by humanoids and exhales oxygen. The chief advantage of the rebreather is its low maintenance requirement; it heals most damage to itself like any other bio-organism. It can be "fed," or fertilized, by simply rerouting the ship's organic waste disposal system into its root-base.

The rebreather is powered by a photosynthetic solar panel resembling an enormous palm leaf, which is unfurled on the exterior hull of ship and exposed to sunlight. Approximately one standard day must be spent exposing the panel to provide enough energy to power the rebreather for one jump (2 weeks). This time can be cut down to a few hours by flying closer to the sun. The panel should be retracted whenever the ship enters civilized space or is approached by another ship; otherwise the presence of proscribed Symbiot tech will be plainly visible.

History: Although its usage is mainly confined to pirates, smugglers and other renegade starships, the rebreather is nonetheless the most economically viable of all blackmarket Symbiot tech. Anyone who has set foot on a starship and drawn in a lungfull of fresh, clean, "outdoorsy" air, free of the chemical-metallic taste caused by conventional air filtering and canned oxygen, wants one. By the time of Emperor Alexius, a handful of disreputable merchants and one decadent "freethinking" noble have found themselves delivered unto the tender mercies of the Inquisition under charges of possession and use of proscribed tech.

Ships fitted with rebreathers are never to be found in heavily traveled systems like Byzantium Secundus or Criticorum; the risk of being seen with an unfurled solar leaf is simply too great. Captains of such ships tend to work around more remote systems like Pandemonium. Most rebreathers are to be found in the vicinity of Stigmata or Bannockburn, the main gateways of blackmarket Symbiot tech, but the harsh scrutiny and unending vigilance of the Stigmata Garrison and the Muster ensures that nine out of every ten rebreathers installed in these systems never make it out of the jumpgates to infect the rest of the Known Worlds. Chainer slave ships have special duties (usually the maintenance of the waste reclamation

systems) reserved for smugglers not clever or fast enough to evade planetary patrols, and the Garrison considers an extended tour of duty on the Symbiot front to be a most fitting punishment for those caught trafficking in Symbiot tech.

The Church has been active in alerting the rest of the Empire to the dangers of the rebreather; particularly effective in this regard has been their use of security recordings from the starship Sesh'dau, in which a lone Symbiot, acting through the Lifeweb, reconfigured the rebreather so that it quickly flooded the ship with poisonous gas. Images from these recordings, from the eerie toppling of crewmembers along the Sesh'dau's corridors to the agonized faces of passengers slowly suffocating in their sealed and barricaded staterooms, are burned into the minds of most citizens, and few feel comfortable on a starship that "smells too good."

Fortunately, tragedies of this magnitude are rare, and the possessors of most rebreathers are often punished by their own incompetence. Even the most impassive spaceport authorities find it hard to resist a sadistic chuckle when a smuggler ship, after attempting a close slingshot around the far side of the sun to quick charge their rebreather, comes limping back to port trailing a singed solar leaf, with its crew all in spacesuits to escape the overwhelming aroma of rotting vegetables which pervades the entire ship.

Doctor Meshlavi Hakim's Patented Guaranteed Health and Longevity Capsules

(Proscribed)

Category: Medicine

Tech Level: 8

Firebird cost: 3 per bottle of 25 capsules

Benefice cost: none

The Capsules are large bright green pellets which, if cut open, are found to be over 90% candy coating containing an infinitesimal speck of the actual medicine near the center (if at all — Dr. Hakim's manufacturing standards are not what they used to be). This speck is actually a complex bundle of RNA, polyactive enzymes, paracrinal metahormones and regulatory neuropeptides. Once the outer coating has dissolved, this "team" of "smart chemicals" disperses to make a systematic tour of the body, locating dysfunctions, blockages, leakages and degraded tissues. Having identified the body's internal weaknesses, the "team" then regulates the body's own systems, microadjusting metabolism, circulation and cellular formation, to repair the body and bring it to a state of optimal health. (This is the equivalent of Second Republic nanotech, but is composed exclusively of biological organic components.) Any character ingesting a Capsule for the first time may add one point to their Vigor for the rest of that span; repeated, regular usage can make that point permanent. (This effect is not cumulative; only one point is gained no matter how many capsules are taken.)

That is the good news.

Each chemical packet contains at least one RNA strand designed to act as a viral Symbiot "seed" capable of possessing organic systems on a limited scale. This is not full scale Symbiot possession, but a dormant state in which the Symbiosis will not manifest itself unless activated through the Lifeweb by another fully possessed and aware Symbiot, or awakened by extreme physical trauma (such as Inquisitional torture). After only a month of intermittent Capsule intake, the user's intestinal flora is fully overtaken, and can be used by full Symbiots against the user (e.g., causing the flora to expand or contract and tear the intestinal wall, or to forcibly evacuate the user's body). If the Capsules are ingested regularly over longer periods of time, more of the body's systems become possessed. After four to five years, enough of the neuromuscular system has been converted that another Symbiot can easily control the user's physical behavior, forcing them to take actions completely against their will. After seven years the user's entire system is completely possessed, but if the Symbiot presence remains dormant all that time then the user may be totally unaware that she is no longer human.

Seven years is the approximate amount of time it takes for all the matter in a humanoid body to completely replenish itself, when all original cell tissue dies and is replaced by new cells; abstaining from Dr. Hakim's Capsules for this amount of time can flush the Symbiot presence from the body (provided the dormant Symbiosis is not awakened by external forces in that time). If the Symbiosis is detected in its early stages (up to two years), it can be flushed from the system by Theurgic purification rites or several months of a strict daily regimen involving frequent trips to a sweatlodge, stomach pumping and colonic irrigation. Second Republic blood filtering technology, if it can be found, may also be effective. The extremely spicy diets favored by some planetary cultures, such as Houses Decados and Juandaasta fiefs, can sometimes kill off the Symbiot "seed" before it can take root.

History: Doctor Hakim's Capsules — a boon to all mankind (and most other sentient races) and the best and surest method of fortification against all the ails to which flesh is heir... Or, an insidious poison propagating itself throughout society by preying upon the common frailties of the Known Worlds races, promising an easy and quick cure for everything. As with any controversial medical treatment, any opinion one hears is usually dependent upon whether the person speaking is a user of the Capsules or not.

Hawked as a universal panacea by Charioteer pitchmen for several centuries, Doctor Hakim's Capsules go back a long way (though not, as the label states, "Since before the Fall!"). For most of its early history, the product was just one of many ineffectual candy tablets sold by unscrupulous Charioteer medicine shows. Some time after the Symbiot War came to its shaky standstill, unbelievable rumors began to filter in from all over the Known Worlds regarding Dr. Hakim's brand — the damned things were actually working! Reports of miraculous cures, amazing recoveries and unexplainable increases in pep and vigor caused the demand for the Capsules to grow, shifting the primary market from ignorant peasants to the more lucrative nobility, not to mention the higher echelons of the guilds and even some of the more faithless members of the Church. Dr. Hakim's brand Capsules became the major health trend of the rich and sedentary, and the price of a single bottle shot up to three firebirds.

In actuality, the new ingredient was the work of a Symbiot using the identity of Raelf Aeldous Maelisch, a combat medic on Stigmata during the War. Maelisch, unbeknownst to his comrades and superiors, became infected with the "natural" form of the virus now found in the capsules. So virulent and aggressive was this original virus that, within three years of his retirement and departure from Stigmata, the human Maelisch had ceased to exist entirely, replaced by a full Symbiot that was virtually indistinguishable from its human host. Finding itself at large in the Known Worlds, the Symbiot-Maelisch pursued an agenda of conquest for which it was most suited, and obtained the position of production supervisor at

Hakim Apothecaries. Taking extravagant pains to hide its activities, it began infecting random batches of medicine with its virus, eventually concentrating on the Patented Health and Longevity Capsules since they received the least scrutiny from quality control and the widest distribution. While the operation has maintained security and secrecy all this time, it is now entering a crucial phase; "Maelisch" is due for retirement soon, and the Symbiot-Maelisch must either create a new identity for itself or generate another Symbiot of its type to take over its job. (Although human coworkers may be controlled through psychic and other means, a Symbiot of the "Maelisch" type must be present to expectorate a quantity of the virus into the medicine mixture.

Few have made the connection between the capsules and the Symbiots, and those that have tried to go public with their knowledge have either vanished mysteriously or have been somehow discredited by the Charioteers, who are not willing to let anyone inspect their gift-horse's teeth. The Dean of Apothecaries will deny all accusations and resist investigation unless he can be shown direct proof of Symbiot involvement; then he will not hesitate an instant to burn all Hakim labs and turn all employees over to the Inquisition.

Some clues to the truth survive in popular legendry, which places Doctor Mashlevi Hakim on Stigmata at the height of the Symbiot War. (League versions of the story assert that Dr. Hakim fought alongside Friar Berthold and the Charioteer Damiana, and is still alive somewhere, thanks to his own medicine. In truth, the good doctor Mashlevi Hakim was never anything more than a hastily rendered face adorning a cheaply printed label.)

Projectile Defecator

(Proscribed by the Church)
Category: Artillery

Roll	Goal	DMG	RNG	Shots	Rate	SIZ
Dx + Artillery	+1	4	100/250*	5	1	XL

* The Projectile Defecator cannot fire at targets less than 30 meters away. It has a maximum range of 500 meters.

Ammunition: Raw organic matter (animal or vegetable — the gun must be "fed" at least one hour prior to firing)
Tech Level: 6
Firebird cost: 20,000
Benefice cost: -15

The Projectile Defecator resembles an elongated reptilian torso (originally a Chernobog Swampcrawler) mounted on squat heavy legs and vestigial arms which aid in aiming and transport. Internally, it is nothing more than a specialized digestive tract ending in a long, heavily muscled rectal canal which can deliver a 5 kilogram payload up to half a kilometer. This projectile does relatively little structural damage to buildings or people, but the stench it releases upon impact can empty a room instantly.

The Projectile Defecator can be loaded through its breech mouth with almost any organic matter, although experienced users of the weapon (a friendless, antisocial lot) tend to select "food" that will strengthen the noxious pungency of its ordnance.

The Projectile Defecator's negative Benefice cost can be attributed to its costly and unpleasant upkeep, as well as the social stigma attached to its usage.

History: The Projectile Defecator, more than any other weapon, is credited with the capture of the planet Daishan, in particular the Symbiot victory at the siege of Hasaka. A great walled city, Hasaka had long been considered impregnable, impenetrable and unbreechable; it was the only safe haven on Daishan, and, after its few gardens and windowboxes had been torn out and salted, withstood direct Symbiot assaults that continued to escalate into a siege lasting nearly a year. Once the Projectile Defecator had been developed and deployed, however, even the stoic and stalwart General Takenoshita de la Heinzblatt had to concede defeat, and the great city was evacuated within hours.

Eventually a number of these weapons were captured by a special Ur-Ukar commando unit. When the Defecator was turned upon its former users, however, the Symbiots retaliated by infecting the device with an airborne diarrhetic virus that caused the rectal ejector muscles to involuntarily relax. The former site of the Ukar encampment on Stigmata is shunned by Imperial and Symbiot troops alike.

Just over a century ago, rumors were circulating among the Known Worlds that the Engineers had developed a new form of aerial transportation which utilized the internal workings of the Projectile Defecator and the principles of the pre-Diasporan jet engine. In response to the pointed queries of both Church and Emperor, the guild swore that no such project existed, nor was any such thing ever even considered for development. The Empire, which had been holding its breath in fearful anticipation, sighed with relief.

In more recent history, the Projectile Defecator was used once by special Imperial Dispensation to defuse a delicate hostage situation, against the strenuous objections of the Church and the hostages. Another incident involved a minor Decados noble who used the Projectile Defecator to quell a rebellion on one of her planetary provinces. After the defeated rebels made an appeal to the Church, an Avestite judge ruled that the offender be sentenced to die by her own weaponry. This case established a legal precedent; the Projectile Defecator was now considered the "dirtiest" weapon in the universe — both literally and figuratively. Use, possession, or unreported knowledge of a Defecator is punished with a creative variety of tortures and executions to be determined mainly by the whims of the judge, jury and intended targets.

Chapter Six: Church Law

The Universal Church of the Celestial Sun has held conflicting views of technology throughout its existence. Formed in an age of human expansion toward the stars, many early Church doctrines cast a favorable light on the inventive and questing spirit of humanity. This view was summed up in the Canticle of the Stars, written in honor of Brother Horatio, a follower of Paulus the Traveler.

This is a curious poem, praising the Pancreator's Reflection "found in the beautiful humming of starships, and the singing of eternal electricity in the minicircuits, collapsed in the hand of human faith moving toward distant suns, the reflections of the reflection of your divine glory." Such an open attitude changed after the collapse of the Second Republic, when technology for the general masses of humanity became rare. With technology reserved for the nobility, Church and guilds of the Merchant League, the paradigm shift in attitudes toward technical innovation was reflected in Church philosophy.

By the time of Emperor Alexius' ascension, the official view of the Universal Church is best summed up in the Doctrine of Universal Inheritance. Drawn up by Patriarch Anchises the Ethical, it was a response to the Fall of the Second Republic. Many of the beliefs and practices of the later Church were influenced by this document, crafted in a transitory age. The technology-oriented viewpoint of the Second Republic was visibly shifting to the closed community orientation of the New Dark Ages. The doctrine stated that there was a Universal Hierarchy (Chain of Emanation) which codified the social and religious structures of sentient society, which were imperfect reflections of the divine order.

Briefly stated, Anchises and the College of Ethicals sought a more rural economy, based on tight knit community service, returning humanity to close contact with the soil (Terra Spiritus). This allowed for a rebirth of spiritual feeling, reflecting from afar the Pancreator's grace. It was felt that a life hardened by physical and spiritual exertions, away from the diverting pleasures of technology, would lead to the soul's swifter reflecting of the Divine Light of the Holy Flame. The Church stated that the high consumer age which they were just leaving had cheapened the value of human existence. Many suffered within the materialistic Second Republic culture. Individuals felt dwarfed by a sea of technical wonders. A loss of self worth and the beginning of existential despair followed. With the breakdown of the technology-based culture, local communities began to emerge as focal points of individual existence, and the Church hierarchy saw this as superior for spiritual salvation.

A quandary arose. The Church still needed tech to maintain communication between worlds (in some areas they feared a justifiable return to rural paganism). The Church held that its own use of technology was a necessary evil, but the Doctrine of Universal Inheritance admonished Church orders not to become enraptured with technology — the love of matter (Amor Materia) — but to instead use technology as a tool "to aid and protect the faithful." While technology was not named an evil by the Doctrine of Universal Inheritance, the doctrine lead to a suspicion of technology which shaped all of the Church's later attitudes toward it. The later doctrine of the Privilege of Martyrs gave the moral and theological reasons for the Church's continued use of technology.

Clashes with the guilds and the nobles over the Orthodox interpretation of technology use became inevitable. Armed conflicts occurred, skirmishes in the great debate. Finally, a resolution was forged. The noble houses were placed in a role of "extreme penance," a symbolic state of repentance for their necessary technology use. Responsible to the Church for the safeguarding of all sentient souls (human and otherwise) placed under their protection, all the noble houses agreed with this new viewpoint.

Nasim the Humanitarian, the famous historian, wrote: "The cynical saw the profits of both nobles and Church in this act; only a select hierarchy would be allowed to play with the damning fires of progress." The faithful rejoined that the organic order of society was preserved, and that devastating wars and horrors had been averted by the delivery of high technology into responsible hands.

The guilds were originally exempt from the Church's grace. However, a curious article, "Bonum Brethren," proclaimed that those who were independent from the Church and nobility yet who allowed the Church the use of their skills and specialized knowledge could receive spiritual instruction and grace. This was a nod to the power of the Merchant League, for the Church needed it for space travel and technological upkeep, although this was never officially admitted.

Later, after the regency which replaced Vladimir I (4550), Patriarch Nadrim proclaimed the guilds to be in extreme penance along with the nobility. He sanctioned their tech usage for political reasons (pressure to keep the peace, bribes by the guilds, etc.). Later patriarchs believe that this was a flimsy document by a weak patriarch, but the guilds cling to it for moral justification when the need arises.

As technical knowledge became rarefied, culture saw a regressive trend. The art sanctified by the Church underwent a revolution in the New Dark Ages, indicative of culture in general. The highly spiritual, interactive art of the Maughold School became replaced by the "new fresco" style of the Urth Revivalists. The new fresco style consisted of oil paintings depicting realistic and sometimes folksy depictions of the life of the Prophet and his followers. Art went from high-tech abstract to realistic depictions of the Church founders. These became visual tools to teach the semi-literate masses. A new style, the New

Imperial, began with the reign of the Emperor Alexius. The New Imperial is a recent trend, known only to those who watch the art world. Some dismiss it as a fad, while others seriously debate which artists belong to this school.

The Church Canon

Humanity entered an age of exploration and uncertainty when the First Republic utilized the jumpgates and expanded into deep space. All areas of society were affected by the expanding frontiers, and theology and philosophy entered a positivist phase, attempting to answer long standing issues with an infusion of new ideas. The old systems were falling apart, or could not sustain the new realities opening up before the human race. While some social philosophers decried the "Pan-Capitalism" of the First Republic's doctrines and beliefs, the excitement of expansion lead to initial optimism. As the social historian Stephan Ramakrishna wrote, "Suddenly bronze age religions, orthodox monotheistic holy writ and Greco-European philosophy fell flat, while certain Buddhist doctrines and process philosophies briefly flickered again in the popular 'educated' eye, but even these were forerunners waiting for the next revelation."

The next revelation came with Zebulon the Prophet. His words and teachings affected the philosophical and theological history of humanity ever after. For this reason, the Prophet's teachings on technology, as well as the

Universal Church's changing attitudes on the subject, are important subjects of study.

Unfortunately, many archives of the past, being computer-based, were lost in the fall of the Second Republic. Theologians viewed the era before the Diaspora as a golden age when humanity tilled the home world, "happy in their innocence" as Archbishop Vencil of Urth wrote. Church repositories hold few records of pre-Diaspora times, and these are known only to select archivists. The various writings of the Church upon technology are preserved, as well as the opinions of strong individuals who influenced the Church's direction toward this matter. Only an outline of the Church's strongest voices are presented here.

Zebulon the Prophet

The Prophet preached in a time of expanding frontiers and scientific discoveries, and he never directly attacked technology as evil. Zebulon deplored the immoral uses technology served (terraforming over previous ecosystems when it was unnecessary to sustain life, for example). While speaking out against material excess, he did praise the eternally questing spirit of the sentient races. He stated that the Pancreator had placed wanderlust and innovative qualities in the sentients to draw them closer to the divine source of the Empyrean. Proclaiming that the Pancreator was revealed within all human (some argue sentient) religious and ethical systems, he allowed for earlier attitudes about technology to influence the new Church. This doctrine, later given the name of the Pantheistic Succession, stated that Zebulon's Gospels encompassed all previous ethical and religious systems. The Church in later ages proclaimed his injunction to quest as strictly spiritual, and highlighted his investitures against the ways in which technology could corrupt the spirit.

The Prophet, ironically, was not really a force in intellectual or philosophical circles in his lifetime. His message took time to reach the general (scattered) masses of humanity. Ignored by the vapid intelligentsia of his day, Zebulon traveled to distant frontier worlds, far from the centers of civilization. While Palamedes later unified the Church, there were competing schools of thought about Zebulon. The Stellar School, a late Diaspora-era and early Second Republic school of thought, believed him to be a moral philosopher and taught a complex methodology based off some of his sayings. This school was eventually stamped out by the Church as heretical, although it did produce some notable philosophers, such as Quintus (2899-2957).

The Second Republic theologian Bethany Kabir wrote that the Prophet's teachings on technology actually shifted after close contact with Ven Lohji, the Ur-Obun disciple, given little notice by the Universal Church. Kabir stated that Zebulon actually incorporated an early Ur-Obun teaching on a subject called *bwhengis*, loosely translated from the Ur-Obun tongue as "animafusion."

Animafusion holds technology to be without given

Timeline

Date	Event
2723	Prophet sees the Holy Flame, begins teachings which result in the Omega Gospels
2850	Palamedes, a follower of Zebulon the Prophet, declares himself first Patriarch of the Universal Church of the Celestial Sun
2860	Patriarch Palamedes issues his "Message to the Colonists," the Church's first statement about technology
2875	Sister Cavana writes "Blessitudes," placing a hierarchy on moral actions, among them acceptable and unacceptable applications of technology. A very influential work in the later Church
3500-4000	The Second Republic. In 3792-5(?) the debates of Archbishop William and Father Vassily raise interest. Archbishop William argues that the spirit needs more than technical innovations to find fulfillment
C.4000	Fall of the Second Republic. Rise of the Preceptors, those Church members who band together to stave off the coming of the New Dark Ages
4067	The Doctrine of Universal Inheritance, created by Patriarch Anchises the Ethical and the College of Ethicals, becomes Church Law. The Doctrine endorses the return of rural communities and the lessening of the urban, technical hold of the Second Republic
4223	Inheritance of Universality affirms what levels of society can use what technologies. This document seen as a continuation of the Doctrine of Universal Inheritance. Breakdown of society into the feudal order of the New Dark Ages
4233	Preceptors declared heretical by the Patriarch
4357	The Church declares the Doctrine of the Privilege of Martyrs, which justified its use of high tech. Some (slight) concessions are given to the League and nobles in this doctrine.
4360	The Universal Creed declared
4525	Barbarian invasions of Known Worlds
4545	Church declares nobles under "extreme penance," recognizing their usage of technology. The League is offered the same recognition in 4560
4550	Emperor Vladimir crowned and assassinated. The Regency, composing the noble houses, League and Church, is set up to govern the Known Worlds
4660	Church issues its list of proscriptive technologies. Occasionally updated, it was to be the final say on the matter
4905	During Symbiot War, the Doctrine of Exemption Exceptional grants technological defense against the foes of humanity.
4965+	Religious unrest among rural populations grows more frequent. The schisms in the Church are brutally suppressed. Return of the Preceptors.
4990	Obion's Beatitudes, a poem written by a Hesychast monk, urges humanity to look to new horizons.

value save that placed in it by the wielder — if the wielder has mastered herself, then the technology will be animated with the user's intent. Immature or "crazed community" usage of technology promotes the bad intentions and shortsightedness of the user. Tools are living things, yet symbiotic with their wielders. Kabir points to Zebulon's Message to The Explorers as an example. Her work was deemed heretical after the demise of the Second Republic, but certain members of the Engineer's Guild and Eskatonic Order have recently brought it to light.

Palamedes: Father of the Church

Palamedes, the first Patriarch of the Universal Church, wrote about the need for technology to defend the outer worlds in his "Message to the Colonists" (2860), but also added an injunction about the dangers involved: "Tools serve the sentient, but there is a grave peril to the spirit when the sentient is lost in the rhythms of energy mastered by the unwise application of such energy by the few." The early Church, often defending frontier worlds, actually saw the divestiture of technology from the large combines to individual colonists as good. They urged its ethical use and application, and inveighed against the abuses to which the First Republic put it.

Sister Cavana

Writing in her Blessitudes, her famous book written after the Ukar War (2875), this Urth Orthodox priest stated her views on the matter in her chapter on Reflected Actions: "It is apparent that, as our actions have a moral lifting toward the Empyrean light, the consequences of our tasks have a reflected moral quality. The Engineer, placing his skills toward the transport of medical supplies, rates higher than the pirate who uses her knowledge to prey off small communities using the Engineer's lore of superior weaponry." Sister Cavana's writings, very popular with the later Church, placed a hierarchy on moral actions, among them acceptable and unacceptable applications for technical inventions and methods.

Archbishop William and Father Vassily

The era of the Second Republic was interpreted by the later Church as a garden of technological evils, luring humanity from the correct path. This civilization was punished by the Pancreator for its wicked worship of science. Later Church views on this era are too simplistic for serious study.

During its rise, the scientific wonders of the Second Republic swept the Church, as well as many existing institutions, under its spell. The Church became a place of ethical debate and consideration, while losing its previous zealous appeal. Some saw this as the natural outgrowth of the Prophet's teachings. It was then that the Urth Orthodoxy began to spread among those who feared that the Church was surrendering its moral center in a highly technical civilization.

The Investitures of Archbishop William, the head of the Orthodox sect, make the point that the spirit needs more than amusements and interactive consciousness expansion to fulfill itself. Much championed by the later Church, Archbishop William was then opposed by Father Vassily. Father Vassily taught that the teachings of the Prophet were often symbolic metaphors, keys which could unlock the doors to enlightenment by all levels of society, from nomadic sentients to the most urbane city dweller. Both were deeply pious men, and both debated hotly. Vassily was beloved in his time, and the leaders of the Second Republic heaped riches upon him, all of which he bestowed to various charities. Mainly remembered now for his teachings on grace, which proved influential, Vassily became the subject of Church legends. However, he is ultimately viewed as benign but mistaken against the earnest warnings of Archbishop William. Many paintings depict their arguments, usually with William the moral victor. Father Vassily is still venerated by the Amaltheans.

Patriarch Anchises the Ethical

The Doctrine of Universal Inheritance, written while the Second Republic was collapsing, paved the way for the later Church's attitudes toward technology. Anchises and the College of Ethicals endorsed the return of small rural communities and the use of the higher technologies by the Church and secular rulers.

The Church began proscribing technology soon after the Fall. Thus began a period of uneasy squabbling and sometimes outright war between the nobles, the Church, and the League. Only after the Church made concessions to these two groups were they "allowed" to continue their campaign against tech. Some believe that the Church could have won against both parties given time, but the nobles held the military might and the League, the machines. The threat of damnation and soul-death through excommunication held only so much sway. More than anything else, it was the Church-influenced peasant revolts that gave the institution early (and now monolithic) power.

The nobles were granted immunity from most proscription during the Barbarian Wars, believed now to have been a concession by the patriarch to Vladimir in return for military protection of Church cathedrals, a frequent target of barbarian assault. After Vladimir's assassination (4550), the Regency was created. It was then, when the Church, nobles and League held power together that the League was finally granted their immunity from the Church's proscription on technology. By the letter of doctrine, these two powerful groups are not fully immune, for the Inquisition still has power against them, but the necessities of the Church to court elector scepters from the nobles and the League meant that the post-Vladimir patriarchs used threats judiciously and politically, rather than theologically.

Bishop Eren

Often believed to be the main force behind the Doctrine of the Privilege of Martyrs, he himself was declared a martyr by the Church when he was found dead in his study. Many believed that he had been killed by a guild assassin, yet the records on Aragon report that "Bishop Eren died of dyspepsia, brought on by eating too many yellow apples, of which he was most fond." Bishop Eren believed that the Universal Church had a divine and moral right to use technology, and defended its use by the Church. At the time, an apocalyptic movement had swept Aragon, one lead by a renegade priest, Father Joeckel, who preached that all technology was evil. Defending the Church against conditions arising locally, Bishop Eren's work soon became doctrine in the Universal Church. The Privilege of Martyrs also became a concession to the other powers, the nobles and Merchant League, acknowledging them in the hierarchy of proscribed tech users. Politics played a part in the final wording of this document, for the Church recognized that it needed the aid of both these groups.

Father Rogan

The Inheritance of Universality, released in 4223, actually specifies what levels of society could morally and legally use what technologies. It also inveighed against the abuses of technology by the nobles and the "Sons of the Republic" (the guilds). This document summed up the prevailing opinions of the time held by the Church hierarchy. It gave the Church theological legal ground to challenge the nobles and guilds, threatening them with Extrication (holy war) if they did not curtail their technologies to all but certain Church proscribed stellar transportation and defense against demons and "dark sentients" (the Vau).

This doctrine, considered an addition to the earlier Doctrine of Universal Inheritance, has been outdated by successive bulls. It is a dangerous document. Only a very bold Patriarch would sanction its use, since it provides a terrible precedent against the League. If used, it could ignite the League to revolt and proclaim a Third Republic, beginning a holy war. Now a largely forgotten document, remembered mainly by close Orthodox advisors to the Patriarch.

Preceptors

After the Second Republic fell, certain members of the Church decried the increasing ignorance spreading across the Known Worlds, and banded together to fight against the fall of night. These mendicants went from world to world, sometimes alone, sometimes in groups, to teach the post-Fall generations about reading, writing, arithmetic and other sciences. The Orthodoxy and the spirit of the times worked against them. Beloved by the new peasant classes but hunted by the Church and the nobles, they vanished from history in 4233 when Patriarch Gregory released a bull declaring them heretical. Yet, their legacy
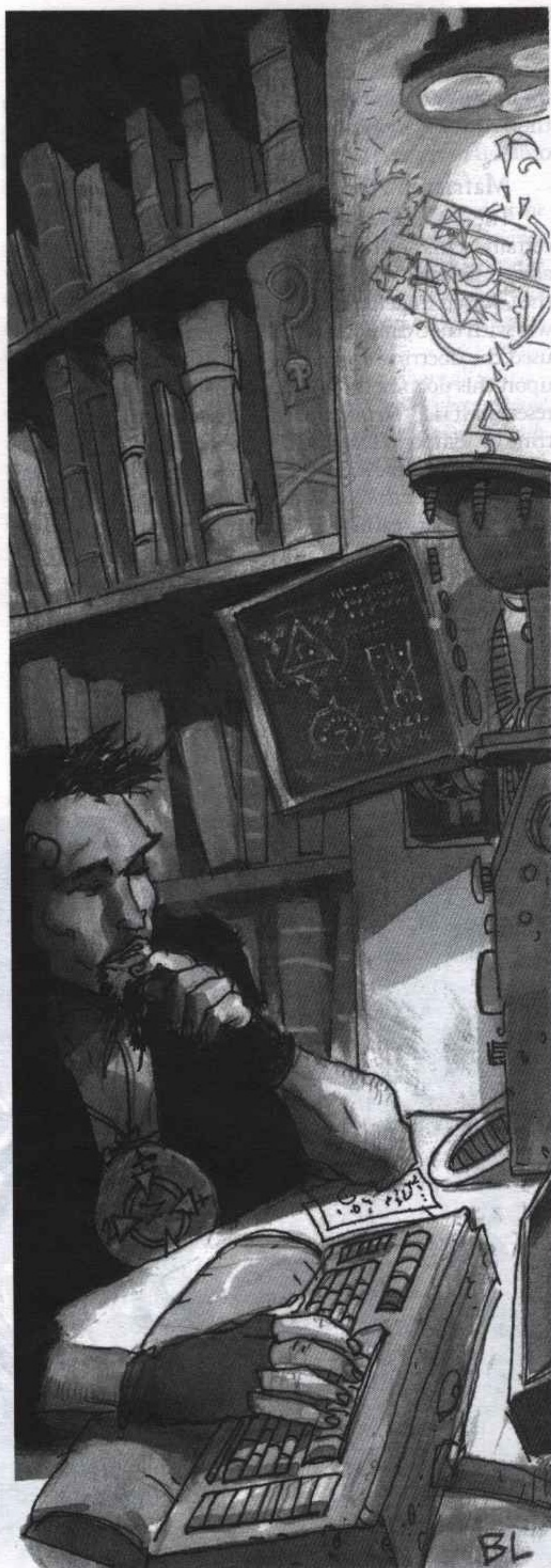
remained, and priests calling themselves Preceptors, often sheltered by sympathetic League members, emerged again into the light of day during the Emperor Wars. Protected for now by popular appeal, the Orthodox Church nonetheless inveighs against them as disturbers of the natural order.

Matriarch Aurelia

The Doctrine of Exemption Exceptional held that certain technologies of questionable moral application are acceptable against "exceptional incursions" proclaimed by the Church in defense of humanity. Written during the war with the Symbiots (4905), certain zealous orders have used the doctrine against infidels. The guilds often call upon this document to explain their latest (discovered) research. It is often misapplied. A lesser doctrine, The Doctrine of Temporal Exemption, states that most technologies are permissible in battling such blights as zombie outbreaks. Written in response to a fearful peasantry, many Church orders gathered individuals together to go on "cleansing crusades" against the zombie outbreaks. These attacks often threatened entire communities.

Obion's Beatitudes

A poem written by a Hesychast monk, it has a curious injunction to "behold the night sky with awe and inquiry, and reflect on the Prophet's grasp for distant worlds." Scoffed at by the mainstream Church, it is promoted by Emperor Alexius's allies. Obion's Beatitudes serve as propaganda for new space exploration. It is a glorious poem, and one of the few that actually inveighs the individual to expand outward again in quests for knowledge. Some see Obion as a holy figure, but certain elements within the Church Orthodoxy want him silenced.

Church Philosophy

Philosophically, the Universal Church teaches that technology belittles humanity, which is urged by the Pancreator to partake in the universal process of creation. Drawing the reflective nature of humanity into covetousness of technology dims the soul's reflective ability to receive the Pancreator's gifts, given to bring humanity spiritually closer to the Empyrean. In the time of the Second Republic many individuals, feeling dwarfed by the technical wonders about them, fell into existential despair. Nihilism arose, in which the individual felt powerless amidst an uncaring universe. When technology had rendered the spiritual life impossible, many despaired. Suicides and senseless acts of violence often accompanied the individual's loss of self worth and community.

When the Second Republic fell, the regression of technical society was not entirely bad. Rural communities arose. The individual became a vital member of smaller villages and towns and felt a sense of self worth again. The place of vanishing technical entertainment and work was replaced by a renewed spirituality and community service.

Gone was the abstract value of credit; a barter system emerged, and cooperative, collective production among the rural populations replaced the competition of high tech society, although money was still used by the freemen and upper classes.

Local decisions could be made by consensus. A reverence for the wisdom of the old replaced the worship of youth and beauty. Harmony, with renewed respect for nature, spirituality permeated everyday existence. Even the concept of time changed from linear to cyclical among the rural peasants, and the year was marked by holy festivals and "feast days." The extended family returned, and the dead were venerated in oral tradition.

Most nobles and guilds still held to certain remnants of Second Republic ideas, but the majority of humanity slipped back into rural existence. It was as if a farmer went to sleep and had a wonderful and terrifying dream of a strangely lit city with wondrous devices and pleasures. Waking again to the cry of a rooster, he scarcely remembered the night world he briefly slipped into.

The Church taught that every life, no matter how wealthy or poor, is equally valid. Freed from the doubting shadow of technology, the soul began to reflect again the purpose of the Pancreator. The Church believed that a life of physical and spiritual work placed an individual within the correct framework the Pancreator intended, closer to the divine purposes of creation. The individual was made to serve the family and community, part of the just order of things. Hi-tech civilization removed the individual from the natural order, dwarfing his sense of proportion. Lost in large cosmopolitan cities amidst glittering toys of desire, the spirit suffered. Humanity was made for the small community, and within that context serves the purposes the Pancreator has intended for his or her spiritual life. An organic, natural order was what the Pancreator desired. The Second Republic, in attempting to overstep the natural order, fell.

The use of technology by the individual, conversely, inflates his or her sense of self even while living amidst its delusional grandeurs reduces his soul. Unsophisticated minds and spiritually unprepared hands can cause great destruction with high tech. Examples abound: a guild pilot who destroys a rival base, killing many innocents; the maddened soldier who slaughters the residents of a village who have already surrendered; the cruel noble who delights in sophisticated devices of torture. Some lines of thought paint technology as the lure of demons, designed to ensnare humanity into spiritual darkness with the fascination of material devices and power. Stripped of these desires, the individual's true sense of proportion emerges. The richness of oral history, the life of the family and the service of the individual to the community are all threatened when technosophy (love of the wisdom of technology) enters the soul.

The Privilege of Martyrs

The Church offers reasons for its own uses of technology, some of which originate in the Omega Gospels. In particular, Horace 16:12 offers the following justification for the doctrine of the Privilege of Martyrs, often used in the time of the fading suns:

And the Sutekian said to Zebulon, "But I have studied the works of holy men, and found naught, for they are at variance with each other. This universe is our mansion, and I have gotten wealth, and fine things, and dwell in my rebuilt mansion with the latest innovations. What is life, but competition, and a struggle for riches?"

Zebulon answered Paulo, saying "Better to have all your acquisitions burn and dwell in solitude, until life awakens in you, fire on fire, then count the newest treasure with the heart of death, seeking to gain meaning by acquisition. For treasures and contraptions are but tools for the few who understand them, not baubles for which the multitudes sell their lives cheaply. Only the few know what I say, and only the parent can minister the safe and unsafe toys to a child, who is lost and easily swayed by the new season's shining objects."

While the Prophet dwelt in an expansionist age of discovery, the unifying purpose of the First Republic had dissolved. His words forged a unity, planet to planet, that bound humanity under a new ethical and theological system. Theologians after the fall of the Second Republic justified the Church's continued use on banned technology by quoting Horace 16:12. The Church was symbolized as the spiritually mature adult administrating to the child, who represented the general masses of humanity. Archbishop Dmitri of Urth, an ally of Bishop Eren of Aragon, wrote to his congregation, "That we take on your sins, and guard over you, and take upon the role of guide in this world and the next is correct. We have become as dutiful ship captains answerable to our distant Master, steering the many through the storms of life. That we use starships and weapons to guard the unguarded is just, for the Church Universal takes on the task of humanity's responsibility, given lovingly to our burdened shoulders by the holy commands of the Prophet. It is our duty to guard against the demons of the dark and keep our flock spiritually reflective, away from the trying corruption of the technical." When Bishop Eren of Aragon died, Archbishop Dmitri combined both of their writings and produced the Doctrine of the Privilege of Martyrs.

The Privilege of Martyrs was created when several rural religious movements swept various worlds, all crying for the end of technological use. At the same time, some within the Church sought a justification for their continued use of technology. Communication between various worlds on matters of Church policy was a powerful argument for the continued use of interplanetary travel. There was a real danger in the New Dark Ages of the rural populations falling back into "vulgar paganism," which indeed happened on some worlds. Church unity

and the guidance of souls were the strongest cases for the Church's privilege of using technology. It was also argued that not all innovations were bad, and that certain innovations in medicine, communication, safe power sources and agrarian planting were in themselves good things. One had to watch for an over-dependence on these things, but there was a tolerable level, even by Church standards, where one could live one's life with some of its blessings.

The other scripture often quoted, and mentioned itself in the Doctrine of the Privilege of Martyrs, was Galaxia 5:8:

"It has been said, that one cannot control the universe until one controls the world, and one cannot control the world unless there is calm in the community, and one cannot control the community until one controls the dwelling, and the dwelling is chaos unless one controls the self. And this is true. For what need of armies and weapons, of the transported wealth of worlds, of homes and ownership, if one is not captain of one's soul? Better to be poor but free and master over the soul than own all the latest innovations of the market, and yet not have mastery over the self. Let those who have wisdom, ponder, and let those who understand, take heed."

Thus, the Church claimed sanctification for the Privilege of Martyrs from the Prophet (ignoring the implications the same statement gave to peasants concerning their freedom). That the Prophet and many of the earlier Church saints perished in incidents relating to space travel also added weight to the argument. The Affliction Technologia is the term the Church gave for their exception in using technology, voluntarily engaging technology's spiritual dangers so that the masses would not have to partake of such sin.

The Privilege of Martyrs had a spiritual sacrificial element in it. This doctrine begins:

"We, the holders of the truth which dies not, do affirm that the sacrifice of the few in the Universal Church for the many souls gathered in our care is a noble and selfless calling, that our use of technology has been granted to us by the Most Holy Prophet Zebulon in concrescence with the Pancreator, blessed be the name in worlds without end, as given to us in scripture, Galaxia 5:8 and Horace 16:12. That we, as masters temporal and spiritual in stewardship of the Pancreator as bestowed in blessed solitude by Zebulon the Prophet, having duties to defend those less spiritually called, are granted the use of the technical tools of sentients, which are denied most, and that this is a just and blessed mystery, understood as our duty spiritual for the comfort of our those in our care."

Some have decried the doctrine as granting a monopoly on power (shared eventually with the nobles and guilds). Others saw that while secular wealth had dried up with the collapse of the Second Republic, humanity was better off in small tight-knit clans and organizations, and the spiritual malaise of the Second Republic had largely disappeared.

The Church did not look kindly on Republican institutions. Aware of the errors of the nobility, they nonetheless thought that noble rule was superior to the Republican legislature and president, who were (the Church claims) the bribed puppets of various interstellar cartels. Representing only moneyed interests, run by pawns of technological conglomerates, the whole system was lacking in spiritual concern for the populace.

Ironically, the League looks back on the representative system of the Second Republic with nostalgia for the very reasons the Church abhors it. Elected politicians represented the guilds and spoke the language of the guilds, and this they interpret as the best form of government, for the League believes that it is humanity's guiding light.

The philosophical conflict between the Church and the guilds is fierce, but the guilds, like the Church, have fallen. They look backward to the Second Republic, and maintain the technical remnants of that age. But their notions of progress are small and somewhat touched by the fanaticism which has stamped itself on the era of the Fading Suns.

The Universal Creed

The Universal Creed, set forth after the Doctrine of the Privilege of Martyrs, reads:

We, the holy apostolic successors of the Universal Prophet, and servant of the servants of the Pancreator, the shepherd and guardian of the divine law, the Church Universal of the Celestial Sun, which shall die not and lives forever beyond the reflected stars, do declare in holy congress with the College of Ethicals the following five truths, that

1. The Pancreator's emanations were created because of the love of the Pancreator for unreflected and reflected creation, and the benevolence in allowing sentients to partake in the grand design.

2. The emanations were reflected perfectly in the divine personage of Zebulon the Prophet, and the system of hierarchies emanating from the Prophet to the sentients is built within the framework of the Universal Church.

3. This natural hierarchy allows for sanctified mysticism and grace of the sentients farthest from the light to be guided by the gratia infudia, those Church brethren infused with reflective grace, as guides toward the light.

4. Self-denial, contemplation and asceticism are the graces which lead the fallen away from the darkness and toward the light. Under instruction from Church teachers to abandon the love of materialism, the wrongful and damning philosophy of the Second Republic, the sentient repentant must show aversion to technical weaponry and conveniences. For the vertical line which leads up to the divine also leads down to the demonic, and the dark powers use the love of technology to cause the sentients to stray, and to free their devouring hunger.

5. They who are denied the light hunger for it, and it is the duty of all sentients to look to the Universal Church of the Celestial Sun for authority in resisting them, and so remain in the gradation of divine light until they are spiritually prepared to advance. For the Pancreator has set forth a natural hierarchy, reflected throughout all creation, which is the Order Universal. Within this reflected order the individual can find succor, aid and

spiritual guidance, mirrored from the Holy Flame in the Empyrean to the Universal Church.

We declare the above to be the truth reflected in the light of the Omega Gospels, sanctified by the teachings of the Prophet Zebulon as revealed by the grace of the Pancreator who resides, universe without end.

Sectarian Creeds

Following are the various opinions about technology held by the different sects and orders of the Universal Church of the Celestial Sun. While the views are generalized, they do not speak to every individual's thoughts on the matter; these can differ greatly from the party line.

Urth Orthodox

The Church's teachings and prohibitions concerning technology must be followed. The doctrines concerning technology use were created by the theologians and leaders of this sect. While the views of individual priests may vary, the general opinion is that technology is a diversion from the soul's full participation in the Pancreator's universe. Only through strict adherence to the Church's moral guidelines can "the greater technologies" be utilized. Those who do not consult the Church are severely punished. Technosophy is seen as a rival to the Pancreator's desire concerning humanity, as revealed by the Prophet in the Omega Gospels. Some elements within the order see technology as demon-tainted, and the doorway to the soul's destruction.

Brother Battle

Technology is seen as a necessary tool in the unending battle against darkness. Of all the orders, the soldiers of Brother Battle are most open to its use. They hold that their members have overcome any desire for technology for its own sake through their intensive spiritual exercises. Most Brother Battle tech belongs to the order, not its individual members. This order is often accused by the Urth Orthodoxy of harboring technocracy leanings (the grave crime of the Second Republic), and the Patriarch scrutinizes it for any signs of deviation. Due to the nature of the order and its members' knowledge of the Known Worlds, they have little of the prejudice and superstition concerning the topic found among the other Church orders.

Eskatonic Order

Certain writings which the order holds (the Apocrypha of Horace) shed a favorable light on scientific inquiry and invention, but the order has learned to be silent about these works. Thus, high science can be a useful tool in the quest for knowledge, but it is still a poor one when compared to the powers of the fully awakened individual mind and spirit. Self-imposed penances keep materialistic dangers to the soul (including the hoarding of technology) at bay. Still, Eskatonics have been useful in uncovering and deciphering old Second Republic knowledge upon occasion, and older members have been known to keep artifacts found on these quests, lest they contaminate the minds of novices.
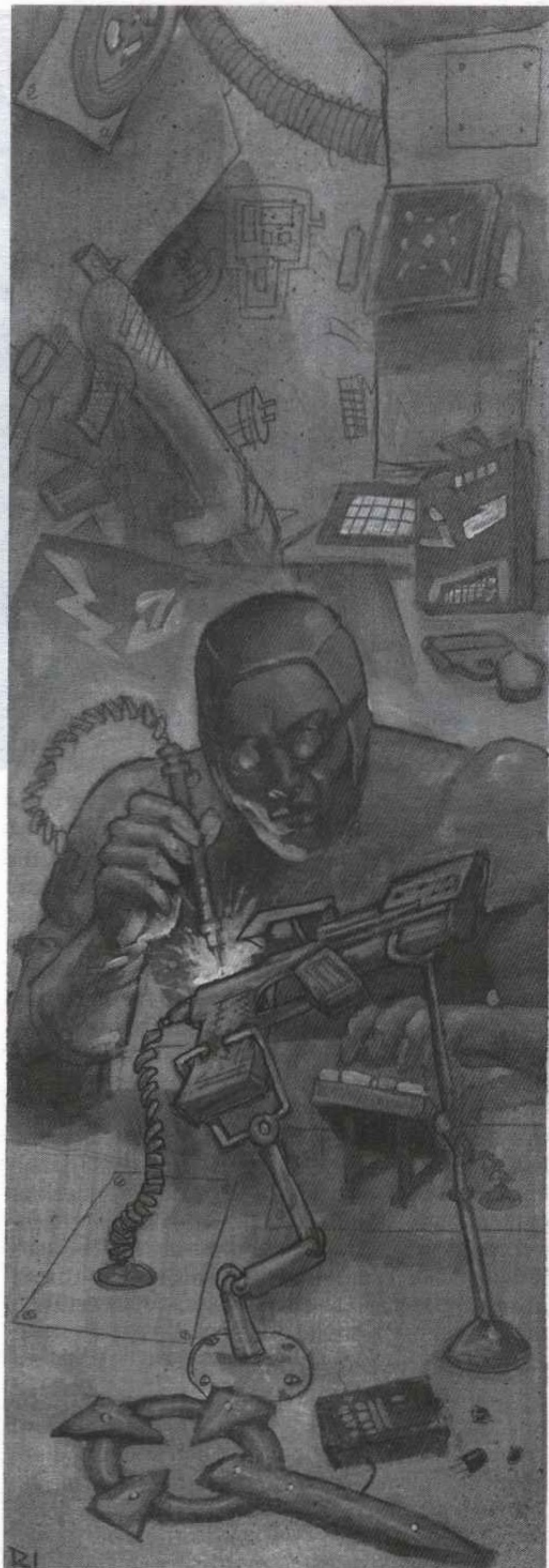
Temple Avesti

Upholding Orthodox teachings on the matter, the Avestites have been known to assassinate those who have broken the Church's ban, including nobles and guild members. The sect itself has a strict list of which weapons are sanctioned for use (flameguns are favored). Aside from the writings of Brother Narvi of Pyre, little of intellectual merit concerning technology comes from this sect. Brother Narvi's comment "Love thou your Republic toys, then thou hast burned once already" is often quoted. There is broad agreement that in battle against Church enemies, the end justifies the means. If technology must be used to slay the abusers of technology, so be it. The holy assassin can seek penance for his sin upon the completion of his mission. Surprisingly, an interesting body of penitent poetry, written by members of the sect, expresses some real eloquence on their love-hate relationship with technology. Yet despite their eloquence, they fully believe in the doctrine of the Privilege of Martyrs.

Sanctuary Aeon (Amaltheans)

Trained to heal the mind, body and spirit, the Amaltheans carry on traditions not found in the Urth Orthodox sect. Using technology to heal wounds and save lives is not frowned upon, although the general practice is to use the body's energies to heal itself. Medical technology falls under the category of "merciful technals" (an ethical term implying healing aid from high tech equipment).

Many Second Republic healing practices, lost elsewhere, have been carried on by the Amaltheans. They do recognize the enigma of high technology, and are aware of the potential threat it represents. Technology is a tool which the spiritually aware alone can properly handle, for if misused, it can cause great suffering.

The danger here is in cybernetics, when an individual replaces a physical body part or organ with a cybernetically-crafted one. Not all cybernetics are proscribed, but they are still suspect. Elements within the Orthodox hierarchy, displeased with cybernetics' theological implications, make their views known. Many (not all) Amaltheans will not replace a body part with a cybernetic one.

The Amaltheans hold that an individual must be ethically mature enough to handle tech, and they do not believe that many nobles, guilders or other Church orders are spiritually advanced enough for the task. Technology falls into categories. Medical and transportation tech is good, while weapons are morally doubtful. Defensive use of weaponry is morally superior to offensive use.

Mendicant Monks (Hesychasts)

The Hesychasts are a diverse group of unaligned, independent monks. Individual opinions cover all sides of the issue, but the majority do not deviate far from the Orthodox line. Many find solitude or life among the peasants preferable to high tech environments. A belief in the

Pancreator's natural universe causes some Hesychasts to decry the soullessness of the technical. A few have claimed that the Pancreator, being actualized in material things, is also within technology. Generally avoiding the political debates sweeping the sects and orders, they form their own opinions on the matter. These are sometimes very introspective but closer to the mark than a volume of Orthodox opinions on the subject.

Counterpoint

An Essay in Response to the Orthodox Taboos Regarding Technology
by Davos Jurge, Master Engineer, for The New Guild Encyclopedia, Vol. VII

But we are as fire, the fire which dies not, seeking to discover new sources, and to those I say, onward! The thirst of your souls beckons you to break stagnant chains, and open star lanes to new worlds and tomorrows without end. For the explorer cannot be held to dying creeds. Those wells are empty. Innovation begins when the well is dry, and distant currents beckon.

— Zebulon the Prophet, Galaxia 12:18, Omega Gospels

It is sad that the very Church which claims to follow the Prophet's words chooses to selectively edit and reinterpret them. Current political thought is read into ancient text, and the meaning of the Omega Gospels twisted to fit into the current power structure. The Urth Orthodox sect has even claimed that Galaxia 12:18 is a metaphor for the soul's spiritual journey and has nothing to do with scientific inquiry and space exploration. But I say it has to do with both the human soul's journey *and* discovery, for the Prophet knew what motivated the spirit in others. Yes, we have heard the old Church arguments before concerning innovation and exploration, that the godly have the responsibility to handle technology of "dubious" power, that the peasantry is better off spiritually without the diversions of choice. The hereditary aristocracy back them up. Both parties have a vested interest in keeping the level of technological innovation low among the general masses of humanity. An uninformed, illiterate population can neither articulate their demands nor break the selective monopoly on technical innovations which enslaves them. They accuse us, the only force which still holds to innovation and maintenance, of harboring Republican dreams of supplanting their power.

To this claim I plead guilty. I come from a distinguished family and count both Second Republic senators and commerce explorers among my ancestors. The Second Republic embraced the ideas of human potentials and progress in all fields. We are their heirs. The Universal Church has attempted to freeze progress, to place a glacier over the innovative passions of unheeded billions. One day the glacier will melt. Why do they attempt to stave off the inevitable? Why have they declared an unrelenting war against the pursuit of knowledge in all fields?

Humans possess curiosity. They are by nature innovative, sentient creatures. Lacking this drive, we would still be on old Urth. We were endowed by the Pancreator with the desire to build, improve and explore. Technology has always answered the call of human need, whether to build more efficient shelters against the elements, weapons for the common defense of family and community, or starships to transport the teeming populations of overcrowded worlds to newer planets.

We are the sentient builders, always delighting in better and more efficient ways to go about our tasks. The peasant on Aragon improves his plow to dig up more of the rich, red soil for planting. A Kish merchant wants a more accurate time-counter for his business. A fisher off old Urth creates a finer mesh netting to feed his growing family. Even the Church priests improve the ragweed content in their paper to keep their written records intact for centuries. It is sentient — and I would argue especially human — nature which calls for better and more improved tools. We are tool builders. About other sentients I can only hazard an opinion. The Vau seem a stagnant culture, yet it may be that they too are held down by conservative superstitions. Who has seen the technology beyond the borders? Yet humanity has an innate need for tool building. The entire race would have to be destroyed for this drive to be permanently suppressed.

The enemies of technology fear the increase of knowledge which accompanies it. Institutions built upon superstition and human ignorance or bloodlines claiming aristocratic rights shatter when individuals learn and share open communication, which leads to a healthy questioning of all aspects of the social order. If their rulers fear a democracy of ideas and the arising of an intellectual aristocracy which will supplant them, then their current actions make sense. Self preservation is the ultimate law of nature, but nature also evolves. Remember that the great predator of today may be replaced tomorrow by a thousand quicker and swifter creatures running roughshod over old bones.

Today the only defender of technology, of piecing together the great scientific mysteries of the Second Republic, is the Merchant League. We are also the true guardians of the human spirit, keeping the eternal flame of freedom alive in dark and angry times. It is our duty to survive and repopulate the future with our ideas. Our ultimate inheritance is inevitable, since the inquisitive nature of humanity can never be fully crushed. The Universal Church has long ignored the Prophet's true words concerning innovation and technology. These were given to Li Chan the starship pilot, and preserved in "The Solar Gospels," a book the Church declared heretical.

Originally titled "The Minutes," it is an account of the conversations between Zebulon and Li Chan the pilot. From the narrative we gather that Li Chan was a star pilot who had lost his wife and child three years previous to his encounter with Zebulon. He met Zebulon just before the Prophet attempted to meet with the Vau. Not realizing the

identity of the man, Li Chan found solace in his words and recorded them. Many interstellar pilots wore voice-activated devices, which recorded their conversations. Late in life, Li Chan wrote the words down after realizing the identity of his companion. The Church initially accepted Li Chan's transcription, compressing them into what is now Galaxia 12:16-26 of the Omega Gospels. They did not record all of it, however; perhaps considerations of length were debated. I depart with the following quote from the Prophet, from the "The Solar Gospels":

"Li, you have seen the distances of space. Reflect on what you have seen, and all that has brought you here. It is the work of many hands, as is all culture and innovation. A reef built by many individuals joined together, not knowing what will come after, but each adding a life to the process. For in building, constructing and innovating, we reach within ourselves to build on what was before us, and to give those after us our improved works. That is the secret of innovation. A distant treasure kept in the deep solitude of our souls, it is produced and given to unseen hands to improve and build upon. That is the way, the heart of intention, world without end."

Commentary by Lorwin Calbar, Muster Captain

All who knew Master Engineer Davos Jurge were touched by his courage, optimism and high spirited sense of justice. He perished in sad circumstances just before Volume VII of the New Guild Encyclopedia reached completion. Delivering medical supplies to Malignatius after the Decados seizure of the planet from the Li Halan, he was caught in a counter revolution. Brutally suppressed by the Decados fleet, Davos perished in the bombing of a field hospital, a casualty of war.

I should like to add that, while displaying a keen interest in the Second Republic (who, as a child, hasn't heard of the wondrous time when all dreams were within reach?), Davos was a realist. Engineers have pride, and too often the guilds are the repositories of Church and noble resentment and anger. We get touchy. He did not want to brutally enforce his family sympathies on the Known Worlds. It was simply his family pride talking. But guild members come from all classes: peasants, freemen, and in some cases, nobility. Dealing with technology and capital, all guilders are dreamers and hard realists. Yet I may add a plea of my own. With the return of Imperial Law, there is a rare chance to set things right. I would like to dedicate this volume of the Encyclopedia to the Emperor. May his Imperial Grace take heed of the following:

Technology is a fine tool. It does not belong in the hands of the uninitiated. Guild members are taught for a lifetime the proper respect, care, and application of tech. It is our task, and one we accept as our place and role in the Known Worlds. The uninitiated should surrender their use of it. It makes sense that a noble's place is in watching over the needs of the population, and the Church's calling is in the saving of souls. To these tasks let them turn. Under the Emperor's enlightened rule, the guilds can ad-

minister the tech abilities of the Known Worlds. This would clear up overlapping (often arcane) areas of authority. An Empire administered by the wisdom of the Emperor and served by the guilds, would profit everybody. The bishop, returned to the serious study of theology, and the noble, administrating her household, could rest assured that the guild would tend to the communication, commerce and medical needs of a new era.
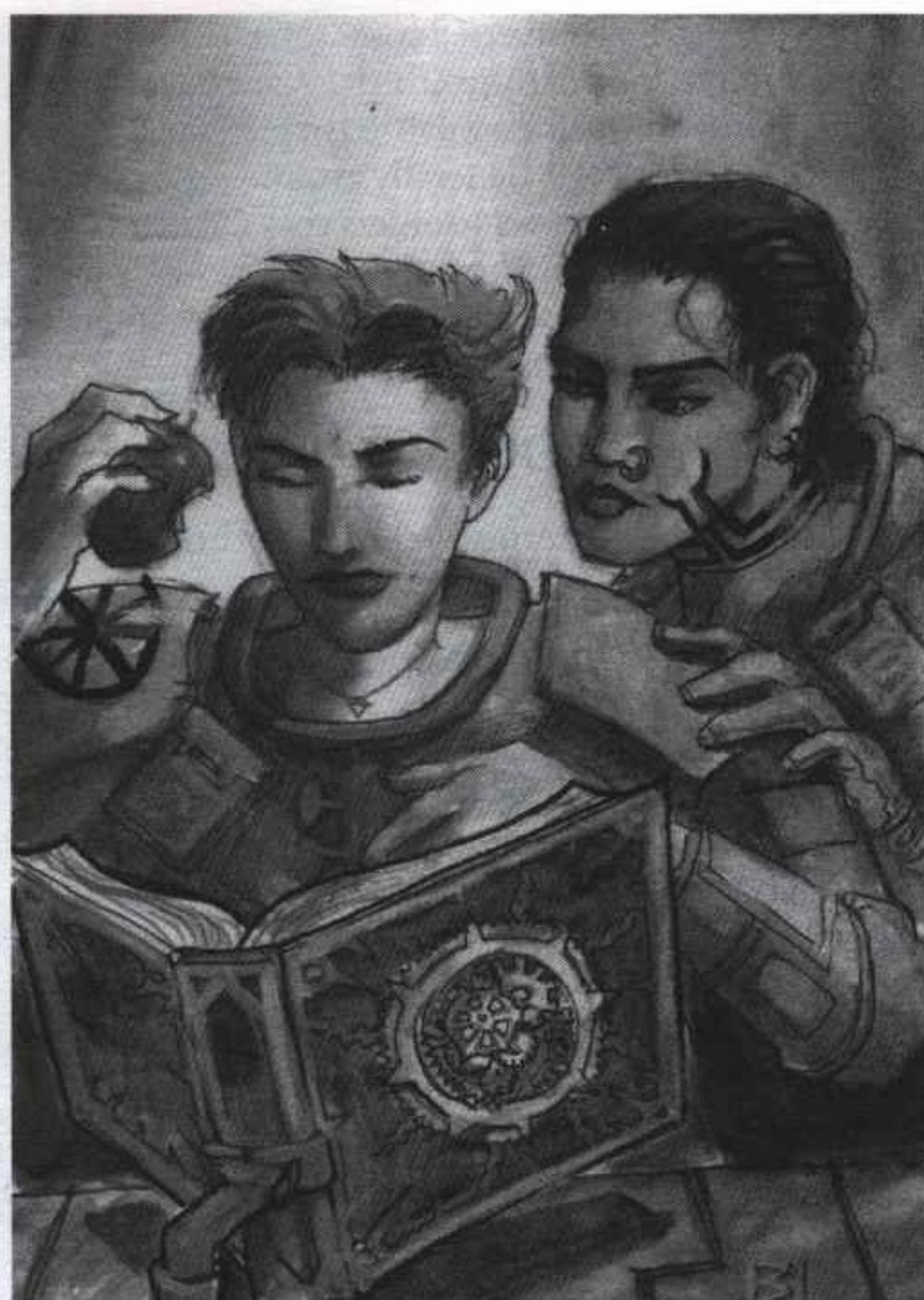
I do not mean to cast a harsh light on the Church or nobles. Some use tech well. But it is not their calling. The Merchant League represents a class of men and women devoted to tech. We painstakingly learn the craft from Guild Masters, until we earn the right to apply it. It is our pride, our calling, and our duty. We do not interfere in theological debates (for the care of souls is a complex matter too sophisticated for earnest guilders). We stay clear of local politics (the nobles, bred to rule, have their duty). Through a lifetime we rise in the service of our chosen guilds, watched over by superiors. It is a careful, slow process. I write with authority when I say that we tend to be conservative in our training and advancement, rewarding the worthy, wanting only a peaceful, profitable time to pursue our craft. The Emperor has given us this. Under Imperial authority, the guilds could administer tech for the benefit of all. Being a forthright, true guildmember, I present this plea in simple language. To his worshipful majesty, I present my case.

Proscribed Technologies

The consolidation of technical power in the military aristocracy, the Merchant League and the Universal Church caused a breakdown in the traditional power structures of the Second Republic, where citizens often elected the local policing militia leaders. This was a civic chain of command, for the police, in theory, served the people. Legal and administrative centers, once tied to the state and Republican capital, became confused when the noble houses won power. An overlapping of civil, noble and Church law resulted. While local planetary legal codes were altered by the ruling aristocracies, Church doctrine remained the same across all the Known Worlds. The universality of Church law and teaching was a comfort in the New Dark Ages, for it provided the one unifying legal and religious link out of the shattered remnants of the Second Republic.

While technology was never questioned by the rulers of the Second Republic, there was debate about weapon ownership. All such debates ended when the noble houses took over, and a tech weapon became a mark of the nobility or those licensed to carry arms in their name. After the Doctrine of the Privilege of Martyrs, the proscription against technology began in earnest. At first applying to certain worlds under specialized conditions, the issue was eventually taken up by the College of Ethicals, who issued the Universal Proscription under patriarchal authority. The Church had hesitated to proscribe certain technologies during the barbarian invasions, since the invaders threatened the entire social structure of the Known Worlds. Often rural villages and outposts had to defend themselves against vicious attacks. After the relative peace of Vladimir I produced the Regency, the official proscriptions were renewed in force.

Freemen handle most common tech. This places them far above the serfs, who have proscriptions against many tech items, and are subject to humiliating searches by the authorities who suspect them of harboring such items. Serfs need licenses to carry many tech items, and their names and items, recorded by the authorities, mark their ownership and usage. This custom varies from world to world; Church law is different (and harsher) on Kish than on Leagueheim.

Weaponry

Knives and staffs are allowed to the peasantry. Bows differ by locality. Some noble houses, who recruit heavily from their local populations into their armies, allow bow practice and supervised gun practice among the commoners. Artifact melee weapons, slug guns and energy guns are denied to the general population. The Church, nobles and their designated soldiery, and guilds can produce and carry these. The only exception granted commoners is on fron-

tier worlds, places of scarce human habitation (where zombie and indigenous wildlife attacks can be devastating) and border zones near the Symbiots and Vau. Some freemen have earned or claimed this right, depending on the locality.

The Inquisition enforces this proscription by branding the hand of the offender with the Dark Sign. The insignia of a black star is recognized throughout the Known Worlds. It shows that the offender left the reflected light, that he has morally fallen. The mark is not irredeemable; it can be removed on occasion. Still, many superstitious peasants shun those with the mark.

When caught a second time the offending hand is cut off. A third offense leads to legally sanctioned execution. Due to many abuses, the Church allows for a Plea of Circumstances during the second and third offenses. Extenuating circumstances exist (zombie outbreaks, etc.); bribes given to local authorities and Church officials are helpful.

Armor

No serf can wear armor better than a studded jerkin, although this often falls under local noble law and customs. Certain noble houses allow great leeway on this matter, sometimes calling on the populace for war on border planets. Again, the nobles and Church agree on keeping the high tech armor away from the population, although the guilds will sell it.

Usually the offending party is punished by noble law. The Church can place an offender in Church or community servitude for five years and may brand him. Bribery or alliances are best to keep the heat off. Letters of Extraction, granted by certain nobles or Church members, prove an exception to the general rule. Usually this is for a service rendered or is purchased from an official discretely. Since noble laws shift from planet to planet, a Church letter has more authority. Energy shields are denied serfs, but a Letter of Extraction covers these as well. Obviously, exceptions exist for the local constabulary, who usually come from the peasant and freeman classes.

Cybernetics

Cybernetics are suspect because they take away from the divine reflection of the sentient body/soul and replace the physical body with the less reflective qualities of technology. Serious debate on whether cyborgs possess souls has plagued Church theologians for years. Some argue that cyborgs exchange the Pancreator's gift when they replace body parts and organs. Most feel that any sentient still possesses a soul (albeit one more in jeopardy) until the majority of the sentient's physical form is replaced. The ratio finally arrived at (in the year 4653) by the College of Ethicals was 64%. Anyone exceeding 64% loss of original physical form was declared "unreflective," the number being arrived at by the number of disciples multiplied by their number. Unreflective beings are soul dead and can be killed by anyone with impunity. (Generally, anyone with over twelve cybertraits, requiring an Alien trait of 7

or more, is considered unholy. However, concealed cyberdevices can hide this.)

This proscription, directed more against the producers of cybernetics than the cyborgs themselves, finds enforcement by the Inquisition. Excepting parts designed for "ethical medical treatment," independent operators and owners of such plants can expect execution. Noble houses producing parts are ignored on principle, unless the Church allies with one house against the guilty party. Some Inquisition members will hunt cyborgs on principle, but the majority do not (hate the sin, not the sinner). A cyborg can find protection through service to a noble house or militia duty, or by membership in a guild. The producers of cybernetics, unless protected by the Merchant League or a noble house, pay high bribes and high defense costs. Since the recent enactment of Imperial Law, the Church's enforcement in this area has been theoretically curtailed. Independent shops still fear the Church, however.

Think Machines

Think machines, unless used by the Church, League or nobles, are heavily regulated because they are considered "approximate reflections," mimicking sentient intelligence. The Church regulates their manufacture and production. Church inspectors are often paid off by rich Reeves to approve otherwise sinful devices. Most nobles ignore the Church inspectors or keep them firmly in tow, manufacturing think machines with impunity. It is the small time (non-guild) operators whom Church law falls hard on. Independent plants are destroyed and their owners jailed or fined.

Regency Law, initiated under Emperor Vladimir, placed the construction of such devices in noble, Church and League hands. Since Alexius, Regency Law is now Imperial Law, and the Emperor is trying to extend his reach by defining secular crimes more fully. The overlapping of Imperial and Church law has started a bitter feud, now kept barely under the surface. Generally, think machines are falling more under Imperial law and out of Church authority, although the degree depends on local conditions (Li Halan worlds still follow Church law on tech, others have local customs). There is only one way for the small-time manufacturer to survive: bribing local officials or agreeing with the local power structure (sometimes the Church) to share in the profits and technology allows for protection.

Communication Devices

These fall under local authority. After the collapse of the Second Republic, the Church made them forbidden to the general population, but this was largely ignored. Communication devices are more common in urban settings. It is more often a local lord's law which endangers the communication device user. A peasant caught with a communication device is subject to public flogging by his lord's servants. During peasant revolts or Church schisms, offenders have been beaten to death. This is permissible ("extreme necessity"), for both the Church and nobles fear the organization of the populace. Pirate stations broadcasting anti-Church or pro Republican propaganda are under an injunction of destruction and their leaders live under the threat of execution.

Medical Tech

The proscription of this technology was prevented by the noble houses and Sanctuary Aeon. Still, the Orthodox looks askance at nano-tech and other aspects of advanced healing tools, fearing that it leads to a love of technology and cybernetics. A few zealous believers have attacked high tech med users, but the Church sanctions healing tools while keeping a wary eye on them. Still, certain practices are proscribed, including medically-assisted suicides, poison production, and the promoting of false elixirs. The first two proscriptions fall under execution, while the seller of false potions receives public flogging. Again, bribery and protection by powerful factions are important here.

Tools

High tech tools are denied serfs (since the Regency, this varies on some worlds). Licensed mechanics, under noble or Church protection, are exempt. Belonging to a guild is helpful here. Bribes to local officials are the best methods for many to obtain legal tools. Again, on isolated or border worlds, high tech tools are tolerated as a matter of necessity. Freemen and licensed serfs make up a small technician class. Many join the guilds.

Starships and Planetary Transportation

The Universal Church of the Celestial Sun has inveighed against populations moving from planet to planet and to obey the local sun as the best source of the Pancreator's reflective light, instead of the distant stars. This happened after the Fall of the Second Republic. Prior to that, the stars were seen as the reflected lights of the Pancreator beckoning humanity onward. Nonetheless, some planetary travel is necessary for the communication of news and enforcement of Church doctrine. Permission for peasants to travel off world must be approved by their lords; offenders can be branded and set to hard labor for years. Papers granting authorization are needed. Certain guilds can get these for a price, and there is a brisk trade in authorization documents.

Calling on The Doctrine of Universal Inheritance, the Church holds that all starships not belonging to the Church or nobles are the property of the Church and can be legally appropriated. Since the Church is the guardian of sentient law, they view this theory as one aligned with the Pancreator's diminution of reflected light. The Church can sanction piracy against the guilds under loose interpretation of this doctrine. It is seldom used, as the Church needs the Charioteers to find the jumproads.

The manufacture and production, as well as maintenance of the larger starships, must be under legal sanction of the Church or nobility. Proscription falls on all

other starships. Since the Church, nobility and League each possess the resources to create or maintain these ships, this proscription enforces the existing monopoly. Directed at potential pirate fleets and a fear of the Charioteers developing a large navy, it maintains the status quo. Production plants can be destroyed. Pirate and barbarian bases are destroyed once found, and their ships confiscated or destroyed. Too large a matter for the Inquisition, the Church must deal with this with the Patriarchal Fleet or in alliance with the nobles.

Owners of starships wanting to escape this proscription must ally with a noble house, guild or Church or pay heavy bribes. Often isolated worlds are the only places where such pilots and crew can find immunity. Captains and crew face incarceration and execution under Church and noble law. Some pilots have had their eyes blinded as a merciful alternative. Since the barbarian incursions there is a justifiable fear of unidentified starships.

Alien Technology

Any and all artifacts of an alien technical nature must be given to the Church immediately. Even inspection of Ur ruins or ruins is outlawed unless a Church representative is present. Hoarders of ancient alien technology are under an indictment of death. The Inquisition kills offenders with impunity and delivers the forbidden technology to the patriarch's aides.

Gargoyles are to be avoided. Soul shards must be handled over to the Church. While Amaltheans and certain members of the Eskatonic Order call for studying these mysterious artifacts, the Orthodoxy fears that their healing properties would devalue the Church's teachings, and it fears the "psychological balancing" said to occur to the wielder. The Orthodoxy planted the idea that this might be a subtle form of possession, similar to the Symbiots. Silence is golden. The less people know about soul shards, the better.

The Church demands all found Philosophers Stones — immediately. The wielder faces death otherwise. The Church finds these Preadamite artifacts problematical. They seem to express the ultimate promise (and lie) of technology, but astute Church officials also see a way to break the power of the guilds with these objects, and place the nobility under their rule. The long standing dreams of a Universal Theocracy could be achieved by the use of a powerful Philosopher Stone. Unless closely allied with the Church, the individual who bears a Philosophers Stone will be hunted by Inquisition teams, no matter who they are allied with.

Second Republic technology is suspect. Any items found belong to the Church. Depending on the utility or power of such items, membership in a militia, guild or alliance with a noble or guild faction is wise; so to are well-placed bribes. The Church response depends on the nature of the item. Serfs and freemen must turn such items over.
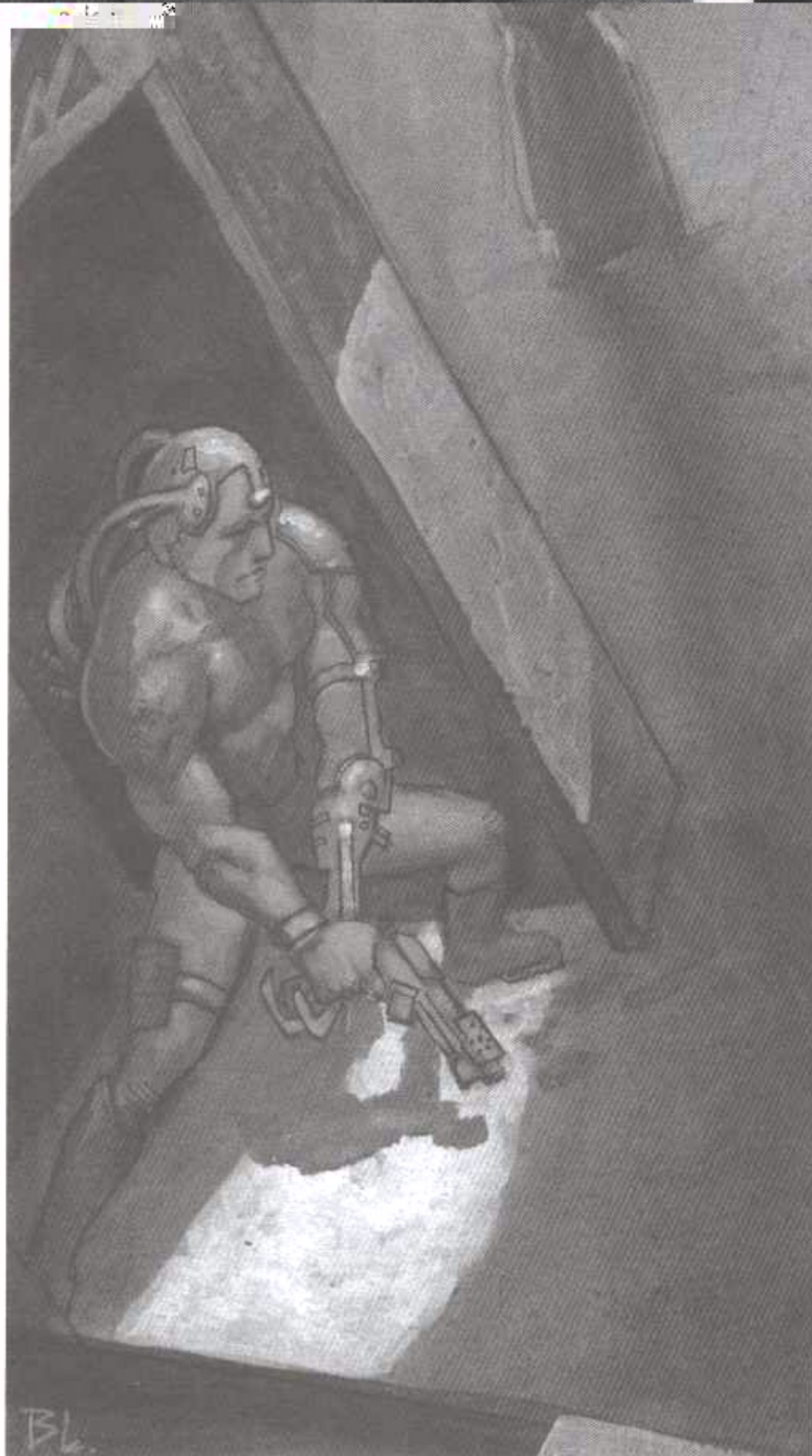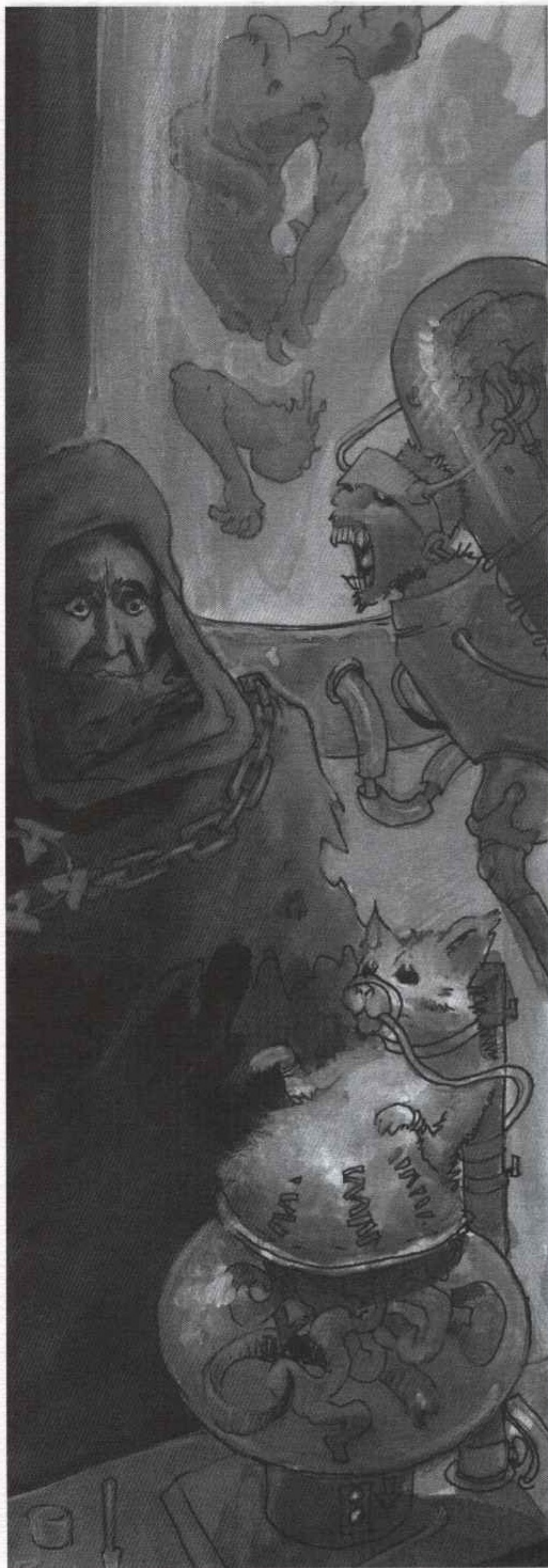
Confession and Punishment

The Universal Church wages an eternal war on several fronts against those who use proscribed technologies. These can be broken down into three broad categories: the culture of tech, the producers of tech, and the users of tech.

Theological arguments are waged against the culture of tech: philosophy, orthodox doctrine and selective use of the Omega Gospels. Their enemy in this field are the guilds, which counter the Church's position with pro-innovation arguments. This is an old battle, and a few Church members, such as Raphael the Apostate, have gone over to the guild position. The old order of the Preceptors believed that technological sciences were worth teaching to the peasants after the Fall, but the growing Church Orthodoxy was against these wandering mendicants, and they disappeared from history until recently. Elements of the Urth Orthodox and Avestite sects hope that a universal theocracy will end the debate for all time. Skirmishes between the guilds and Church have occurred for centuries. Despite attempts at reconciliation (Brother Ragnor's "Annunciation Technologica"), it is a debate that shows no signs of abating.

Against the producers of proscribed technology, the Church calls down an Exoneration, which is a sanctioned destruction of a tech manufacturing base and the apprehension of the owners. Small plants ("pirate plants") can be taken out by local Church authorities once authorization has been given. In times of Extreme Necessity, defined by the Church as civil war, revolution, or an attack on the Universal Church, authorization need not be granted. The responsible parties, once captured, are placed before a tribunal of the Avestite order with an Orthodox representative. In the case of cybernetic or "body plants," the guilty pay with their lives. The Church holds no trial.

Larger plants, usually well guarded, present a problem. A Church bishop can call together several Church orders for a coordinated attack. Outside mercenaries hired for the operation receive pay. Members of Brother Battle fall under this mercenary category. Great successes against slaver-plants and pirate operations promote the Church's military efficiency. When the plant is under the protection of a noble house or guild, an Avestite assassin or assassin team will be called. The Avestite, given sanctified assassination, kills the plant owner, setting an example by fear. Other Avestites infiltrate the plant and destroy it with explosives.

Usually the Church leaves the large League manufacturing plants alone, desiring to avoid outright war with the League. Instead, they concentrate on independent manufacturing plants. Usually these are cheap, hastily assembled operations using slave labor. They are the scourge of the Church and guilds, although they are sometimes protected by a noble house. Church and League have found themselves at times in odd alliance against these

independent pirate operations. Conversely, a noble house will sometimes ally with the Church to take out a League plant, often to get their hands on the newest technologies. Guilds and nobles ally to spy on the technology and strength of the Patriarchal Fleet.

The Church intelligence networks track down the users of tech. Any sect or order can begin a search once the necessary information has been gathered. The Church has one of the best intelligence networks, due to its presence on every planet in the Known Worlds, and the use of confessional and penance pleas. Often, someone's guilty conscience can reveal a plant using slave labor, or a discovery by a lone hunter reported to the local priest makes its way up the Church hierarchy. Confessors, most often drawn from Temple Avesti, track the more serious abusers. Confessors have broad powers, and local Church personnel cooperate with them, since they carry the Patriarchal Seal. Si̶͟͟͞͞

semble on a planet, it is the peasants who first find out. Often suspecting the local authorities, they instead go to the Church first. Many slave-shops have been shut down and destroyed by the Church. These usually produce cheap non-guild products when a market arises for the product. On a few occasions, an offender is released from execution on the oath that he or she will add their knowledge to the Church's own technical plants. These manufacturing plants, operated by the Church, produce weapons, communication devices and repairs for the Brother Battle order and the Patriarchal Fleet. These are not sweat shops, because the Church has many guidelines for the ethical treatment of tech workers. Run by Orthodox priests, they are administered by strict Church law. The workers earn good pay and benefits. On many poor worlds, landing such a job is actually prestigious.

Glossary

Canticle: A sacred chant, poem or liturgical play originally found in the Omega Gospels, but later including the works of Church Founders and later holy sentients.

Chain of Emanation: Belief taught by the Church of a Universal Hierarchy, beginning with the Pancreator and emanating down through the various universes on a reflective path. This teaching attempted to justify the social and religious structure of post-Second Republic society, itself an imperfect reflection of the higher divine order. The result was a justification of the New Feudalism.

College of Ethicals: Founded in 3124 by Patriarch Eamon. Originally an advisory council on ethical and theological matters, composed of all the Church Orders. After the Second Republic, the Orthodox elements of the Church dominated the college, and it became a mouth piece for Orthodox views. Composed of archbishops, bishops, and selected Church personnel, it has been a rubber stamp for strong patriarchs and a source of contention for reforming patriarchs.

Confessors: Individuals, most often drawn from Temple Avesti, who track down serious tech abusers.

Dark Sign: The insignia of the black star branded onto those who have (temporarily) left the Church's light. The Dark Sign indicates that the branded individual fell from the way, but is not irredeemable.

Exoneration: A sanctioned destruction of a tech manufacturing base by the Church.

Extreme Necessity: Church teaching that in times of grave crisis, a local Church community can defend itself without approval from the Church hierarchy.

Extrication: A holy war called by the Church.

Gratia Infudia: Church brethren infused with the Pancreator's grace, and hence moral and spiritual teachers.

Merciful Technals: Technical equipment involved in healing. First used by the Amaltheans to describe medical equipment.

Pan-Capitalism: The overall mercantile and economic philosophy of the First Republic, as proclaimed by Second Republic and Church historians. It denotes the accumulation of capital and credit beyond all other values, and therefore was denounced by the Church.

Pantheistic Succession: The Prophet's declaration that the Pancreator was revealed within all human (some argue sentient) religious and ethical systems, and that his revelations enveloped all earlier revelations. This allowed the early Church to freely make use of earlier philosophical and theological traditions while defining and debating Church issues. Pre-reflective foundations contributed to the building of the Church.

Pre-reflective: Revelations of the Pancreator before Zebulon which were not properly understood by the receptors. Still, some of these religious and ethical revelations influenced aspects of the early Church, including some Xianist philosophy. Pre-reflective traditions were thought

to be partially in error, yet were not condemned, as only limited (local) understanding could be made of the Pancreator's vast truth. Pre-reflective is not unreflective; the Pancreator's teachings, even if not fully understood, were partially grasped to the benefit of earlier humanity.

Sentient: Intelligent (usually tool-making) beings, gifted by the Pancreator with spirit. Term used in early Church to include all the intelligent races of the Known Worlds. Used less frequently after the New Dark Ages, when humanity became the main focus of the Church's concern.

Soul Dead (Anima Mort): A sentient who has lost its individual spirit due to various causes, most of them a gradual and willing rejection of Church teachings (e.g., the replacement of the majority of the body by cybernetics). Soul dead beings are said to be unreflective, unable to grasp or understand the Pancreator's truths as revealed by Zebulon the Prophet.

Stellar School: Late Diaspora-era and early Second Republic school of thought, which viewed Zebulon as a philosophical teacher and proclaimed him the founder of their philosophical tradition. This school was eventually stamped out by the Church as heretical.

Technocracy: Church term for a government run by technocrats and those in league with them. The vile crime of the Second Republic.

Technosophy: Church term for the love of technological wisdom, a sin when it takes precedence over Church and community.

Terra Spiritus: Church term defining rural man's close proximity to the earth and the star of his/her birth, considered a natural part of the divine order.

Unreflected Excoriates: The producers of forbidden writings, usually hostile to the Church or community standards.

Unreflective: Not able to grasp the reflected glory and teachings of the Pancreator as taught by Zebulon the Prophet. Generally suggests a complete collapse of moral and spiritual life (e.g., the demons who gnaw on the light of the stars are said to be unreflective beings). The Unreflective Road is the road into spiritual darkness.

The Dark Sign
(branded onto sinners
who use proscribed tech)

Appendix: Preceptors

While the Church is renowned for its close guard over the use of technology and its often rabid enforcement of tech proscription, this has not always been the case. After the Fall, as humanity slipped into ignorance, it was the Church that took up the task of keeping the light of learning strong. Certain priests saw that the nobility's seizure of power was detrimental to the greater good of humankind, and they rightfully feared a descent into barbarism, ignorance and base superstition. They banded together into a cabal to do what they could to keep civilization from slipping backwards. These missionaries fanned out across the darkening planets to spread their teachings.

Most of these missionaries were from the upper classes of Republican society. They were learned and respectful of science and the fruits of industry. This was an age before the Church had universally proclaimed its anti-technological stance. While many priests decried technology, the Church had not the political power to enforce a ban on scientific study, nor the popularity to enforce such a ban even among the ranks of its worshippers. The "teaching missionaries" went to communities across the Known Worlds, determined to keep the lores of science, literacy and mathematics alive among the common folk.

They soon gained a name: the Preceptors, or teachers. The Church fathers, busy vying for political power with the Ten noble houses now in control of the Known Worlds, paid little attention to this small but growing sect. While they took time out from their political battles to denounce such hubris, they did little to prevent the missionaries from their work. The Preceptors became immensely popular. On many worlds, they became the only source of advanced learning, as universities crumbled, shut down by the nobles, their staffs left destitute or indentured to now teach only the sons and daughters of royalty.

As the years passed, and the Church cemented its power, it finally turned its eye on discontents within its ranks. The inter-sect warfare of these years nearly destroyed the gains the bishops had fought so hard for. Only with the aid of the noble houses was the Orthodoxy able to force their dogma on all the peasants of the Known Worlds; those who were not already Orthodox were now forced to give up the sectarian beliefs of their parents. Many small sects were wiped out, their bishops tried for heresy and their worshippers forced to recant and join the Orthodoxy.

The major sects, especially those backed by certain noble houses, were able to cement a place within the Church hierarchy. While diverging from the universal charter of the Church, these sects were accepted to avoid even greater divisions within the ranks of worshippers. The Amaltheans and the Brother Battle order were allowed to maintain their flocks and chapels; to deny them was to invite outright holy war.

The Preceptors suffered badly from the sectarian cleansings. Hounded by fanatics and forced to stop their teachings by zealous nobles, they were eventually declared heretical by a Patriarchal Bull in the year 4233. The priests were forced to recant and then stripped of their ordinations. Some fled, dispersing into the Known Worlds, aided by an underground peasant network loyal to them. While their flame officially died, a secret order lived on. It consisted mainly of backwater parish priests invited to join the "teaching missionaries." In regions forgotten or ignored by the Church fathers, they secretly gathered to delve into the lore of their ancestors. They taught such lore to their loyal parishioners, those who were trusted not to run to the local lords with information of such heresy.

While widespread learning died out and ignorance became the norm for most people, those villagers lucky enough to live near a Preceptor parish benefited more than most. But they knew the penalty for revealing such benefits. To their lords or visiting bishops, they were simple, dirty, unlearned serfs. But when their masters retreated to their castles and the bishops to their cathedrals, the shutters would be closed, the candles lit, and the family would gather to learn their letters, or read from forbidden literature, stories about men free to choose their own destinies. The craftsmen would gather in the barn and the Preceptor would teach them the science of metallurgy or

agriculture. When the blacksmith's swords outperformed others' weapons, or the crops produced amazing yields, the lords would compliment themselves on the loyalty of their vassals.

But when the occasional local priest was revealed as a Preceptor, the penalties for all his flock were harsh. The villagers under his care would be sold into slavery and their families split up, sent to harsh work farms where their advanced learning could provide them or others little good. Certainly, the occasional lord would recognize the value of such an efficient village, and refuse to condemn them, or make a show of condemnation for the Church's benefit, all the while ensuring that the village continued to produce to high (and thus highly taxed) standards. However, such enlightened nobles were rare, and the Preceptors more often than not risked their lives and those of their parishioners. But few peasants, even knowing the risks, would refuse to harbor a Preceptor among them.

Preceptors Today

During the Emperor Wars, the Church finally lost its grip on the masses. Far too concerned with leaping into the fray himself, the Patriarch pushed his immense resources toward forcing one of the noble contenders to sign a Holy Writ declaring the supremacy of the Church over the state, the Patriarch over the Emperor. These efforts failed. Few nobles were so desperate as to sign such a death warrant on their power and way of life. Alexius instead offered the Church other concessions. Finally, the Patriarch, fearful that someone less friendly to the Church would gain the throne, supported Alexius's bid for power.

The cost of these struggles for the common folk was great. Their pleas for justice from the ravages of the wars went largely unheeded. Even those bishops horrified at what the commoners experienced were unable to relieve them; the Church's coffers were fully engaged elsewhere. As wars tore the Known Worlds apart and peasants died in droves, victims of planetary assaults, bombs, intentional plagues and other atrocities, the simple faith of the common folk also died.

While the Orthodoxy still maintained a hold on most peasants' beliefs, a large sector of commoners turned instead to long-dead sects for solace, for the proponents of these sects would walk among them and aid them in their trials, while the Orthodox priests were sent to the cathedrals instead to consult on tactics. The result was a vast resurgence in breakaway sects. Many old sects — and some new ones — appeared to minister to the needs of the many. Among these were the Incarnates, who claimed that the Pancreator could be reached through personal prayer, not just Church approved ceremony; the Children of Xian, an ancient sect of wanderers who exalted the religious wisdom of family members and prophets above ordained experts; and the Preceptors, the teaching missionaries.

Building on ties with the Merchant League forged during their long night of secrecy, the Preceptors appeared in force. Their priests revealed their membership in the secret order and began to teach openly. Their parishes, once officially Orthodox, became houses of Preceptor learning overnight.

The Church at first responded with force and threat. But their resources were too weak to fight a sectarian war on so many fronts, across so many worlds. When the Amaltheans announced support for these many new "paths to the Pancreator's grace", the Patriarch withdrew his Inquisitors. No official statement concerning these sects has ever been made by the Orthodoxy, whose priests pretend for now that such sects do not exist. But all realize that the Patriarch is building his power, gathering his allies and preparing for a move of some sort. Many believe that he cannot move against all the sects at once, and so some within these sects seek the Patriarch's favor, hoping for official recognition if they turn against the other sects. Such Judas's are creating internal divisions within the weak sects, threatening to split them before they are fully formed — which many see as part of the Patriarch's plan.

For now, the Preceptors and other sects exist openly, building their flocks and waiting for the hammer to fall. In anticipation, they seek allies elsewhere. For the Preceptors, these are friends in the halls of Leagueheim. But their enemies are not just in the Church. Many nobles resent their goals, and consider it a crime to illegally train their property, the serfs. While they are wary about moving

against the popular priests openly, they plot with assassins and malcontents to "convince" the priests to cease their teachings.

Teachings

Preceptors seek well-rounded wisdom. They believe a priest's best virtue is in knowing many fields of study and mastering as many of these fields as possible. This is not, however, for personal gain, but so that the priest may teach his wisdom to others. The more people he can teach, the better. The sect's goal is to return common lore to the people, to educate the populace to rise above barbarity.

Certain members are more pragmatic. They see this goal as an obvious threat to the current social order, and as such, know it will not be allowed by the nobility without significant bloodshed. Unwilling to be the cause of such horror, these priests try to convince their fellows to restrain from their peasant teachings, keeping their high tech lore for freemen or guild allies. But other priests see revolution as necessary. They believe that civilization will not rise until the nobles are overthrown and a Republic put in their place. Such criminal heresy — against both Church and state — is rarely stated openly, but such rabble rousers do exist in the sect, ready to inflame the masses to revolt. For now, the more pragmatic priests run the sect, for they make up the old guard leadership used to wariness and caution.

The lore available to a Preceptor is vast. Once ordained into the sect, a novitiate can request to learn under a particular priest renowned for a particular lore. This usually requires travel to another planet or parish, for the priests are spread far apart. But their ranks are smaller than most sects, so priests must become knowledgeable in many fields to be able to teach this lore to others.

Many Engineers and other guildsmen have sought ordination into the sect of late, and they are gladly welcomed, for their lore is obviously useful. However, ordained guildsmen are still forbidden by their guild to teach guild secrets and specialty skills. Indeed, many among the Merchant League see the Preceptors as a threat to their power base, although others see them as a method of weakening and perhaps even toppling the Orthodoxy and its powerful hold on technology.

Preceptors do not recognize the Inheritance of Universality or the Doctrine of the Privilege of Martyrs (see Chapter Six: Church Law). They interpret the Prophet's words differently, saying that he never spoke against technology directly, that he only admonished people to temper its use with spiritual and moral teachings. Preceptors are not careless, however; they recognize the Inquisition's opposition to them and are usually careful not to ignite witchhunts. Most of their teaching to peasants takes the form of agriculture of craft lore, things helpful in their lives. Rarely do they teach high-tech skills, and then they are careful about which students they admit.

Preceptors do not recognize any of the Church vows of poverty either. Many of them freely gather wealth, although some old-guard members believe this is a corruption of the sect's teachings and not only threatens to bring censure down upon them but sets them apart from the common folk they preach to.

Very few Preceptors are known to practice theurgy. They have no rites of their own; those who do practice it usually learn rites from another sect in return for teaching a lore or skill.

New Skill

Social (Teaching)

Roll: Extrovert + Teaching

It is not always easy teaching others to learn. Too often, knowledge imparted is quickly forgotten or the student struggles to understand it. Getting it to stick in the minds of students is an art. Teaching allows skills to be taught to others in less time than usual. However, learning is a two-way path; the student must want to learn. Part of this skill involves igniting interest in a student and aiding her discipline, but this skill cannot take the place of a student applying herself.

A teacher can only teach what he already knows. In other words, the teacher must himself know the skill he is trying to teach. In addition, he can only teach students who are less capable than he is; those with higher skill ratings must seek a more qualified teacher. The Social (Teaching) skill is not required, but is helpful.

To raise a skill by one level, a student must train a number of weeks equal to the current level he has in that skill plus one. A student learning Ravennan history who already knows the Lore (Ravennan History) at 4 levels must spend five weeks training to raise his skill to 5 levels. It takes one week to learn the basics (level 1) of a particular skill.

Assuming that a teacher has 10 hours a day, five days a week to train students, there are 50 hours of teaching a week. If this is adjusted up or down, it will take longer or shorter to learn or raise a skill. The required amount of time can be adjusted downward by the Social (Teaching) skill. Before the tutoring begins, roll Extrovert + Teaching and subtract five hours for each victory point. Thus, a teacher who rolled 3 victory points can teach the curriculum in only 35 hours a week.

The roll is made only once per teaching period. If the teaching is interrupted for more than a week, it can be resumed at the same pace and with the same hours accumulated unless more than three months has passed, in which case all hours are lost and the student must begin the study anew.

Player characters are somewhat of an exception to this rule; many of them are self-taught through experience rather than training. They must pay experience points to raise skills or learn new skills. The gamemaster can be flexible about the amount of training time it takes player characters to train (that is, spend their experience points for

new skills or levels in existing skills), and should allow most of this training time to pass between game sessions (out of active play).

Instead of spending experience points, a non-player character who spends the requisite amount of time learning must roll Wits + Focus; if she fails the roll, the training has failed to stick. She has remembered only trivial things from the class. She can, however, repeat the training until she gets it right. A good teacher comes in handy here: the non-player character can substitute the teacher's Social (Teacher) skill for her Focus.

Costs: A teacher's fee greatly depends on what he is teaching and to whom he teaches it. Most charge more to teach nobles or their children, but give breaks to clergy seeking training. When training serfs, barter is usually accepted instead. Priests of the Preceptors sect do not charge for their teaching per se; they instead collect tithes, which are usually in the form of food and lodging, but many (especially younger priests) ask for money instead. However, if a student is wealthy, the priests will strongly urge that student to heavily tithe the Church in coin. This has gained the Preceptors a money-grubbing reputation among their detractors.

Complementary skill:

• **Empathy:** The ability to figure out what your students are feeling can help in gaining their attention or getting them excited about learning.

Those Who Teach: Preceptors

The simple robes of a Preceptor do little to hide her attitude: satchels with books, scrolls or laptop think machines betray her true leanings. The clinking of firebirds in her purse aids identification. But the popularity these priests have engendered among the common folk usually protects them from the harsh criticisms of their detractors, whether they be Inquisition, local lords or old-guard guildmembers.

Characteristics: Faith, Extrovert, Wits, Tech
Natural skills: Charm
Learned skills: Academia, Read (Urthish, Latin, Urthtech), Social (Teaching). Choose one or more fields to specialize in: Artisan, Lore, Redemption, Science. Preceptors may learn any guild skill without requiring a Professional Contract.

Blessings/Curses: Mentor (2 pts: +2 Extrovert when teaching)/ Rebellious (+2 pts: -2 Calm around authority figures)

Benefices: Ordained (9 pts maximum), Riches (no maximum), Well-Traveled, Contact. A Preceptor cannot have an Expense Account.

Forbidden Lore:
TECHNOLOGY

Crucible of Progress
— or Engine of Sin?

Technology in the Known Worlds is not what it once was. Science fell from its pinnacle with the rise of feudal lords and superstitious priests, stamped out by ignorance and fear. Few now dare to ignite the fires of progress, to build anew. Instead, engineers pick over the bones of the past to revive ancient war machines for their masters. Visionaries are rare, working under stigma of heresy. Their patchwork creations — whether robots or refrigerators — are considered monsters by the Church. For those who spurn the laws of the Church and construct demons of metal and lightning, there is no escape from the wrath of the Inquisition.

Forbidden Lore: Technology includes information on: starships, artillery, vehicles, Church law, Known Worlds economics, think machines, golems, cybernetics, psychic tech, Vau Tech and alien artifacts.

A must for well-equipped heretics everywhere.

FADING SUNS

Holistic