TRAVELLER

SWORD WORLDS



SCIENCE FICTION ADVENTURE IN THE FAR FUTURE

TRAVELLER

SWORD WORLDS

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T R A V E L L E R

INTRODUCTION

Lying just outside Imperial space in the Spinward Marches, the Sword Worlds Confederation is both a cultural region and political alliance populated by the descendants of Terran humans. Most sources agree on these basic facts but little more. Indeed, most of what is known about the Sword Worlds is garbled, biased, distorted or just plain wrong. This is almost as likely to be true inside the Sword Worlds Confederation as beyond its borders.

The planets now known as the Sword Worlds were settled around 1,500 years ago by exiles from a civil war in the Old Earth Union. They shared a common cultural history, broadly speaking, and developed in isolation from the emerging Third Imperium for much of their early years. By the time these worlds were contacted by the Imperium they had a well-developed starfaring society that resisted integration into mainstream Imperial culture. This has led to conflict on several occasions, and friction on many, and the internal politics of the Sword Worlds are equally vigorous.

Even the term 'Sword Worlds' has a variety of meanings. It can refer to the Sword Worlds subsector or some of the planets within it. It can also be applied in general terms to the cultural region lying within the subsector or more specifically to the Sword Worlds Confederation as a political entity. The nature of that political entity can also change.

Certain Imperial scholars refer to this as the Sword Worlds Question; is it appropriate to say 'the Sword Worlds is…' or 'the Sword Worlds are…'? The problem is that this question has different answers in different places and that any answer can change at any time. The one thing Imperial researchers agree on is that the Sword Worlds is/are… interesting.

General impressions of the Swordies, as the Sword Worlders are often nicknamed, are similar. They are an honourable and proud people, with a Scandinavian-Germanic cultural heritage filtered through centuries of spacefaring. They are chauvinistic and protective of women, with strong gender roles and highly individualistic as well as generally 'physical' rather than cerebral or social in their demeanour and outlook. They are also tough, pragmatic and loyal, making for solid friends and implacable enemies.

These impressions, gained over many years of interactions, are generally accurate but also somewhat vague. The truth about the Sword Worlds, and about the Sword Worlders themselves, is far more complex than commonly accepted stereotypes would suggest. It is also quite surprising in places, at least to those who do not know the Sword Worlders well, and of course there are some facts the Swordies would prefer remain undisclosed; dark secrets or forgotten memories best left undisturbed.



CHAPTER ONE

HISTORICAL PERSPECTIVE

Around 350,000 years ago, the race known as the Ancients dominated what is now Charted Space. They terraformed many worlds, including some now forming the Sword Worlds Confederation. It is not clear what the Ancients' purpose may have been but they created a cluster of planets habitable by humans or a similar species. The Ancients are known to have transplanted humans from Terra to many worlds in Charted Space and perhaps beyond, and may have intended to create a nursery for what would become a starfaring culture; it is impossible to say.

The Ancients did transplant humans to Darrian, just a few parsecs from the Sword Worlds, and there are those who suggest the Sword Worlds were intended for the Darrians when they developed. This hypothesis is, unsurprisingly, not popular in Sword Worlds space. Whatever their intentions, the Ancients destroyed themselves in their Final War some 300,000 years ago. If any human populations were placed on the Sword Worlds before this they did not thrive. The Sword Worlds thus lay empty for millennia.

TERRAN ORIGINS

It is not clear what conditions existed on Terra after the visitations of the Ancients. Whatever society existed, if any, was wiped away by Terra's latest ice age starting around 110-120,000 years ago. As the climate warmed, around 15,000 years ago, humans spread out to claim new territories, eventually discovering how to work metal and build cities.

By around -4520 in the modern Imperial calendar, low-tech civilisation was widespread across Eurasia, with numerous 'barbarian' peoples – many of them every bit as sophisticated as the great empires – on their fringes. The Roman Empire collapsed around -4000, leaving a vacuum into which these 'barbarians' could develop.

Two of the most prominent cultural and genetic groups during this time were the Scandinavian and Germanic peoples, who shared many features in common, including a tendency to be warlike and industrious, and also many legends and cultural beliefs. In time this culture was diluted and modified, although revivals of traditional Scandinavian or Germanic culture occurred. Facets of this culture still existed when Terrans invented the jump drive and emerged onto the interstellar stage.

As the glaciers began their retreat on Terra, the Vilani were venturing into space. They had built their great empire by the time the Terrans joined them among the stars and the resulting Interstellar Wars saw the resurgence of several traditional warrior cultures on Terra and her colonies, most heavily distorted or idealised. Interest in old Norse and Germanic traditions gradually waned but never completely died away.

The defeat of the Vilani Imperium and collapse of the Rule of Man resulted in the Long Night, during which most regions lost interstellar contact entirely. However, starfaring activity was still commonplace in the Terran Mercantile Community and this eventually morphed into the Old Earth Union. It was civil war within the Old Earth Union that brought about the colonisation of the Sword Worlds.

THE VOYAGE OF *GRAM*

Despite centuries of interstellar travel – or perhaps in response to the vastness of the universe they had discovered – the people of the Old Earth Union clung to ancient cultural identities. Thus the force that set out from Terra aboard the troopship *Gram* and her escorts had a strong Scandinavian and Germanic identity despite many of its personnel were from worlds other than Terra. *Gram* herself was named for a famous sword from old Terran mythology.

The mission went badly awry both militarily and politically. *Gram* and her escorts were ambushed and most of the force destroyed; the survivors then discovered the war had been lost and they had been declared war criminals by the victorious Reformers.

Not surprisingly perhaps, the personnel aboard *Gram* and her escorts belonged to the Loyalists and for a time their leaders entertained the possibility that they could continue the fight. This, it soon became apparent, was

nothing short of suicide. The only other prospect was to find a new home somewhere and that home had to be far enough away that the Old Earth Union would not follow.

Military personnel aboard *Gram* were woken from low berths and informed of the situation. The few who wanted to go home departed aboard neutral ships and the majority left Reformer-controlled space. Initially the fleet headed spinward, picking up a few additional vessels along the way. The most powerful of these was the light cruiser *Robert the Bruce*.

Reaching Wu, in the Magyar sector, the *Gram* fleet encountered the Aslan Faoheirlyu clan. The Faoheirlyu were embroiled in a clan war and under pressure from their overlords to contribute more. They had plenty of ground troops but few space assets, so they struck a deal with the *Gram* fleet that satisfied the needs of both groups; whilst *Gram* remained safely out of the way with her troops aboard, her escorts fought for the Faoheirlyu. The troops were offered the chance to stay in Aslan space. A few did and some are said to have earned distinction fighting alongside the Faoheirlyu.

Gram's escorts captured numerous enemy vessels, earning hard cash that was used to charter merchant ships. These quietly returned to Terran space with a message for the families and friends of the exiles. Some chose to leave the Old Earth Union and joined the *Gram* expedition, which then began a lengthy crossing of Aslan space.

This was no simple undertaking. Inter-clan politics meant that the safe passage earned did not extend all the way across the Hierate. *Gram's* officers were nevertheless able to bargain, bribe and battle their way to the coreward Aslan border. Having come so far – much further than originally planned – they kept going, primarily to put distance between themselves and the expansionistic Aslan.

Eventually, *Gram's* jump drive began to fail. With further travel far too dangerous and a habitable planet in-system, the exiles' leaders decided that fate had decreed this would be their new home. In -399 the first colonists were landed on a world named after their ship.

COLONISATION

The exiles knew that sooner or later they would face a serious threat. It might be the Old Earth Union or, more likely expanding Aslan clans. They did not know what other potentially hostile races existed in the region, but it was imperative to build a society capable of defending itself as quickly as possible. The exiles had a head start in this endeavour, in that they possessed several jump-capable warships but those would not last forever.

The exiles had thousands of young, fit people with which to colonise their world. They had strong technical skills in some areas, but lacked much in the way of scientific expertise, and also possessed a great deal of weapons but few tools for making them. The military hierarchy shared by all exiles rapidly evolved into an efficient and effective government. Plans were made and driven to completion with a hard-nosed pragmatism that would not have been possible with civilian colonists.

Even as short-term goals were pursued, long-term issues had to be prepared for. A survivable society needed a large population base and that meant a changed role for female personnel. The exiles could afford to lose some men but women of childbearing age were considered too valuable to risk; female soldiers were not expected to become docile baby-making machines but a great social change took place within the exiles' society in the early years. Gender started to matter.

Initially, the only obvious change was that females could choose (and were encouraged) to leave dangerous undertakings and risky jobs to men. Over time this crystallised into the idea that some tasks were 'male' and some were 'female' oriented. What began as a slightly more protective attitude towards women would eventually develop into the modern Sword Worlders' ingrained chauvinism. At the same time an attitude of 'make do without complicated stuff' arose, which has coloured Sword Worlds designs and organisations ever since.

A deliberate programme of settlement building and expansion took place on Gram, with larger towns built in habitable areas along the coasts and smaller resource-extraction sites in the inland deserts. At the same time, the remaining jump-capable ships explored the region and discovered that Gram was just one of a cluster of habitable worlds. They learned of the nearby Darrians, although at that time the Darrians were not a threat as a result of a self-inflicted disaster named the Maghiz. Over-zealous experimentation had caused a nova event in the Darrians' sun, smashing their interstellar society back to primitive levels.

Recognising that the Darrians would eventually recover, the exiles directed their colonisation of additional worlds towards Darrian space. Joyeuse, Colada, Tizon and Hrunting were colonised, with additional colonies planned but not implemented due to lack of transport. These settlements were small and only tenuous contact was maintained. Even husbanding the remaining jump-capable ships by only making annual visits to the colonies still saw them, eventually wear out.

The cruiser *Robert the Bruce* was sent back to Terra. It made the transit and was able to set up an intermittent exodus of settlers who were funnelled through Aslan space. *Robert the Bruce* began the return journey to Gram but never arrived. Its fate remains unknown. The number of colonists coming from Terran space was never large; typically it was a single family or small group that made the long passage. There were exceptions however. In -321 a large group arrived and decided to settle on what is now Caladbolg. By this time Sword Worlds culture had changed sufficiently that the newcomers did not really fit in. They were joined by additional settlers from established Sword Worlds colonies but drifted away both culturally and politically.

SECONDARY EXPANSION

The second wave of Sword Worlds expansion began around -300, by which time Gram had a population approaching half a million and sufficient industry to begin producing starship components. Once mothballed ships had been reactivated they were used to plant colonies on other worlds in the region. A custom-built colony ship named *Genfoedsel* soon followed, with batches of colonists shipped out at a rate that kept Gram's population steady. The majority went to Sacnoth, which was selected as a secondary industrial centre.

Contact with the Zhodani Consulate in -292 and the resurgent Darrians in -265 resulted in the reallocation of some shipbuilding resources to military vessels. These were rather basic at first, designed more for longevity in service and survivability in combat than high-end capability. There was no conflict however; a little trade was undertaken but – particularly in the case of the Zhodani – the distances involved made large-scale trade impractical.

It was not considered desirable to undertake too much foreign trade in any case, in order to limit influences on the developing Sword Worlds culture. Trade was useful in bringing in items and materials not locally available but the Sword Worlds leadership were careful not to become economically, politically or socially dependent on any outside source. At the same time, trade did allow some intelligence-gathering to be carried out. This was directed not only at the Darrians but also towards local inhabited worlds. Few possessed the technological sophistication to be any kind of threat but early Sword Worlds expeditions listened for rumours as they traded among the local worlds.

These expeditions made use of cheap and basic starships designed for long cruises and were ostensibly a combination of exploration and trade. Few worthwhile markets were identified, and it is likely that the expeditions cost far more than they made, but the intelligence gathered was extremely useful to the long-term planning of the Gram leadership. Among the most important facts gleaned by the expeditions was the knowledge that there were no immediate threats from nearby worlds, allowing strategic thinking to be directed towards the Darrians.

It was apparent from the very beginning that the Darrians were a possible threat to the development and perhaps survival of the Sword Worlds. They were not unfriendly but recent history had shown Sword Worlders that even friends and neighbours could become vicious enemies given the right circumstances. Once Darrian starships began to appear on the spaceways the threat was elevated to the level of unlikely-but-serious and preparations began to deal with the problem if it arose.

The Sword Worlds did not seek war with the Darrians, or anyone else, but they developed a philosophy sometimes stated as 'strength and preparation are armour against fate'. In short, they did not want a war and would not seek one but if it came anyway they would win it with minimal casualties and disruption. The 'armour against fate' philosophy has become ingrained in Sword Worlds psyche to this day and it is openly acknowledged that plans exist for a variety of conflict scenarios involving all possible opponents. The very earliest of these, designated simply 'Case Darrian', was published long ago and remains a part of popular culture.

Case Darrian posters adorn many walls, including places where foreign visitors will inevitably see them. Some are fanciful, depicting starfaring Norsemen battling hordes of oddly elf-like Darrians. Others show classic or current weapons or starships doing much the same thing. One of the most popular is simply the text of the plan itself, with segments enlarged and highlighted. 'Case Darrian' is sometimes used as a slogan in advertising or motivational displays, usually in the context of something the Swordie-in-the-street cannot be without if Case Darrian occurs. Not surprisingly, this attitude has caused friction over the years but Sword Worlders typically respond with the cliché that 'preparation does not imply intent' or 'if they don't like it… Case Darrian'.

SACNOTH PRE-EMINENT

Preoccupation with Case Darrian caused a shifting of emphasis within the emerging Sword Worlds. Gram's industrial output was increasingly dedicated to building warships and long-range exploratory trade vessels, with colonial expansion becoming the focus of Sacnoth. This

had significant implications that were not immediately apparent. Several worlds were colonised by ships out of Sacnoth, creating a cultural bond with their parent world rather than Gram. These new colonies were named for fictional rather than mythological swords, although the sources from which they were taken were heavily influenced by traditional Norse/Germanic lore.

The year -232, when Sacnoth launched its first starship, is generally regarded as the point where the Sword Worlds ceased to be 'Gram and its colonies' and became a collection of independent worlds tied by bonds of kindship and shared heritage. Less charitable observers refer to this era as the point where the Sword Worlds' plan broke down and they had to confront the reality that their well-organised interstellar state was in fact little more than a sack full of cats.

The plan had been for Gram to specialise in military hardware whilst Sacnoth fostered the economic growth of the Sword Worlds as a whole. Sacnoth did invest in the developing colonies – notably its own – but came to overshadow Gram economically. This led to tension and ultimately a two-year war in which warships built by Gram declared for Gram itself or its rival Sacnoth.

Opinions vary as to whether this conflict was a civil war, rebellion or conflict between rival independent worlds. The outcome is less ambiguous however; Sacnoth won the war and in -186 established the Sacnoth Dominate. The Sacnoth-led alliance was a little more friendly to outsiders than the previous Gram government had been but although diplomatic links were established with the Darrians and Zhodani there was little increase in trade or outside influences.

Plans were made during this period to seize additional territory. Survey expeditions ranged far and wide, with outposts set up on worlds in what are now the District 268, Glisten, Lanth and Vilis subsectors. Although populations were established on several worlds, the project was disrupted by tensions between Gram and Sacnoth, which in -104 became open warfare.

COLLAPSE OF THE SACNOTH DOMINATE

The original Gram-Sacnoth conflict was a relatively civilised affair, with collateral damage kept to a minimum and all efforts made to fight a 'gentleman's war' with a view to reconciliation afterwards. The same approach was used at the beginning of what became known as the War of the First Rebellion but its character soon changed. Initially, the Sword Worlds polarised into two belligerent camps known as the Gram Confederation and the Sacnoth Confederacy, with a third grouping of worlds wishing to remain neutral, the Hofud Assembly.

Alliances shifted rapidly after the collapse of the Sacnoth Dominate in -102 and in the early stages both major powers tried to entice or bully neutral worlds into their camp. Defence of neutrality drew some into the war either alongside the main belligerents or as part of the Hofud Assembly whose determination to remain outside the other factions forced it to fight for dominance in its own right.

The war gradually intensified, with strikes on infrastructure intended to weaken enemies resulting in the destruction of every major shipyard in the Sword Worlds. The war ended around -88 due to a lack of capability, with few functional ships left and no means to build more. By -80 there was no interstellar government in the Sword Worlds and only a handful of vessels maintaining any contact at all between star systems.

This period is known as the Fimbulvetr, anglicised as Fimbulwinter, after a period of devastation and hardship presaging the onset of Ragnarok in traditional Norse mythology. It left a mark on the Sword Worlds psyche, notably an aversion to using destructive weapons against economic or industrial targets. Outsiders are often puzzled at this attitude, which seems to centre on the destruction of potential rather than civilian loss of life. A Sword Worlder will explain that 'it's what happens afterwards that turns the stomach', referring to the concept that whilst mass casualties among the enemy might be justifiable in war, the suffering and hardship goes on long afterwards and falls on those who had nothing to do with the conflict.

THE FIVE STATES AND THE TRIPLE DOMINION

Starship construction was eventually resumed, with the first vessel leaving Gram's yards in -11. The launching of vessels by other worlds led to the creation of small polities centred on Gram, Sacnoth, Tizon and Sting, with a union between Narsil and Anduril forming a fifth state. It was into this environment that the first Imperial exploration missions arrived. First formal contact came in 53 and by 73 the Sharurshid megacorporation had pushed a regular trade route through to Biter.

Trade with the Imperium altered the balance of power in the Sword Worlds. Dyrnwyn became the dominant power in the Trailing Assembly, which had formerly been led by Sting, whilst Colada displaced Tizon in the local

league. Historians are divided as to whether changing circumstances accelerated or delayed the drift towards new conflict but, in any case, Sacnoth and Gram began another highly destructive war in 98. This ran for five years, until the other three states joined forces to put a stop to it.

With little left to fight with, Sacnoth and Gram were easily defeated. Each was divided into numerous balkanised states, their space forces divided among the newly formed Triple Dominion. Likewise, worlds that had been part of the Gram or Sacnoth sphere were placed under the control of the other three powers. The Double Monarchy of Anduril and Narsil gained Orcrist and Excalibur while Beater and Tyrfing joined the Trailing Assembly led by Dyrnwyn. Meanwhile, Colada consolidated its position as head of the Tizonian League and gained colonies, which were ruled directly.

The Triple Dominion was a turbulent time, with the three powers constantly trying to increase their position over one another but forced to work together to prevent Gram or Sacnoth from being re-united. Proxy wars were fought on both worlds, with the three factions supporting local nations against one another or cutting down any that became too powerful. The situation continued until 212, when a civil war erupted on Colada. Nuclear exchanges wrecked Colada's economy and greatly reduced its population and subsequently the Triple Dominion collapsed into disputes over control of Colada's former territories. In the meantime, formal relations with the Imperium had been established (in 147) but this had little effect on the local political turmoil.

THE YEARS OF CONFLICT AND ENDEAVOUR

The next four centuries are generally referred to as 'the era of squabbling states', sometimes phrased in the rather more grandiose manner as 'years of conflict and endeavour'. Alliances among the Sword Worlds formed and broke up on a near-constant basis, with the result that there was at least one war ongoing at any given time.

Early in this period, Tizon saw a resurgence as a major power. The remains of the Coladan fleet, orphaned by the destruction on the homeworld, jumped to Tizon and launched a coup. Captains and senior officers were installed as a new nobility on Tizon, whilst the world instantly became a major interstellar power. Under the command of Admiral Svein Danjalsson, later known as Svein the Great, the Tizon fleet (as it was now known) became a force for stability in a very troubled time.

The Tizon fleet was not sufficient to win a war against the other powers but it was more than enough to protect commerce in the local area and to keep the war away from Tizon and her allies. As a result, Tizon grew in economic power and was able to expand its industry, supporting the fleet and even building more vessels at a time when other powers tended to be in decline. Economic and military power translated to political influence and it might have come to pass that Tizon achieved dominance over the region by economic means.

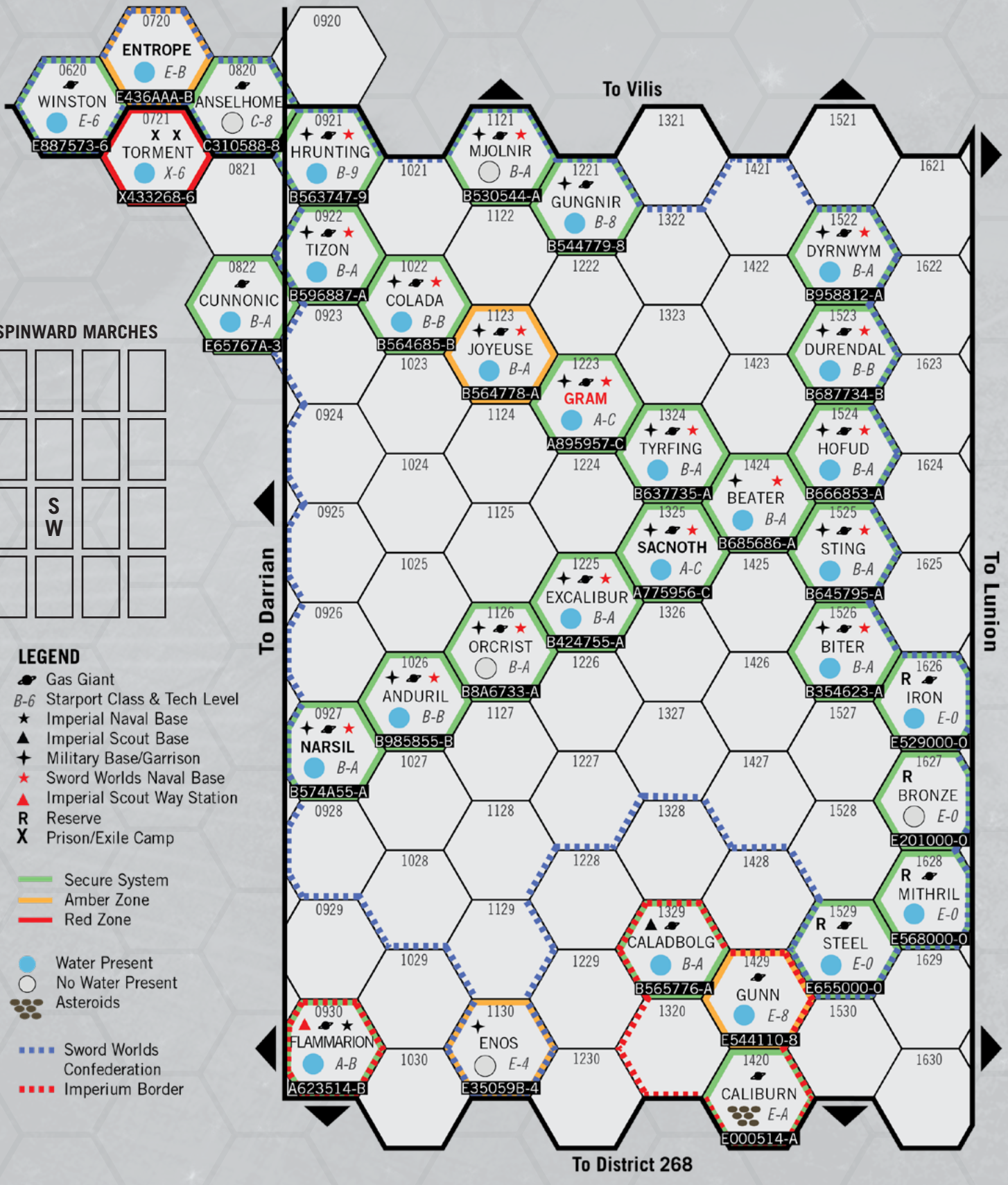
However, in 281 an accident placed the 18-year-old Svein II on the throne long before he was ready. His ambitions went beyond protecting his corner of the Sword Worlds and gradually gaining in power; he decided to conquer nearby worlds and rule them as an empire. Initial successes created the seven-system Tizon Empire but also provoked an unusually coherent response from the other powers. After some skirmishing it became apparent the empire could not expand further, so Svein II wisely pulled back to consolidate his gains.

The standoff between Tizon and the rest of the Sword Worlds continued over the next decades, reducing opposition to reunification of Sacnoth and Gram whose military and industrial capabilities were desirable in the ongoing cold war situation. Sacnoth re-emerged as a unified state in 364, with Gram following suit in 371. Their contribution to the Tizon situation was negative, however. Both tried to grab offworld territory and came into conflict with one another. The anti-Tizon alliance, which had become known as the United Jarldoms, began to collapse and was formally dissolved in 388.

Sensing an opportunity, Tizon invaded Joyeuse, which was at the time a protectorate of Gram. The backlash was unexpectedly powerful and after suffering several defeats the Tizon Empire agreed a peace deal that gave Gram new territories and a stronger position in the politics of the Sword Worlds.

In 383, Hofud launched a campaign of conquest against Sting, forcing its government to flee into exile on Biter. Attempts to crush continued resistance led to a 20-year guerrilla war on Biter, which became too costly for Hofud to bear. Unable to accept defeat, the Hofud occupying force began rounding up the population of Biter and relocating them to other worlds. Those who sought to avoid this fate were forced to retreat to remote areas. They were wise to do so; it was subsequently discovered that approximately 80% of the relocated population were dumped in space rather than delivered to a new home.

SWORD WORLDS SUBSECTOR



This was achieved by construction of transport ships specially for the purpose and could not be represented as anything other than a callous act of carefully planned mass murder when the atrocities were discovered. It was hoped that since some reached their destination, there would be no careful comparison of the numbers leaving Biter and those reaching a new home. However, word got out when one of the modified transports was damaged in an accident and in addition to condemnation from other states the war on Biter intensified.

It is probable, although never been proven, that the Biter resistance received offworld assistance either from governments or small groups sympathising with the cause. The assassination of a member of the Hofud ruling family was the high point of the resistance and also the beginning of the end. The Hofud military responded with a campaign of biochemical warfare, which was ostensibly aimed at defoliating the regions thought to shelter Biter guerrilla groups. In reality a range of biological and chemical agents were used, many directly lethal to humans.

After a time, the more or less indiscriminate deployment of biochemical agents morphed into a variant on the classic 'cordon and sweep' operation. Contaminated regions were created as barriers to guerrilla movement or to drive them into zones controlled by Hofud forces. These measures proved effective in breaking the resistance on Biter but such was the anger among other Sword Worlds states that the victory was short-lived.

In one of the few incidences of cooperation between Gram and Sacnoth, an alliance of Sword Worlds states led by Dyrnwyn demolished the military of Hofud without warning and conquered Biter itself. This led to the usual territorial upheavals, with Gram gaining Beater as a colonial possession whilst the Dyrnwyn Compact was assigned Biter, Hofud and Sting. The campaign took place in 439 and was over in a matter of months.

Alongside this upheaval, cultural changes were taking place with the rise of Aesirism. This began as a surge of renewed interest in Scandinavian and Germanic culture from Old Earth and rapidly grew into a major cultural and religious movement. Aesirism was based upon modern interpretations of Old Earth myths, which had themselves been distorted by time.

Aesirism did not begin as a political movement and it is likely that most of its adherents had no interest in one. However, a number of leaders began to emerge who had big plans and in 468 a coordinated insurrection began. Four worlds overthrew their governments; others tried. Those that created an Aesirist government changed their names, becoming Margesi, Mjolnir, Gungnir and Mistelsten. Of these, three are today known by this identity but Hrunting (Mistelsten) eventually reverted to its old name.

There was no formal alliance or coherent political structure among the Aesirist worlds and their leaders were popular figures rather than strategists. However, most of the Sword Worlds accepted the situation; had it not been for the response from Tizon the Aesirist movement might have eventually expanded to unify the worlds of the region.

After the rise of its empire, Tizon had implemented a cult of emperor worship in which the ruler was seen as a demigod. Aesirism was a direct challenge to this divine status; one that had to be eliminated by military action. As the closest Aesirist world to Tizon, Mistelsten (Hrunting) bore the brunt of the initial assault and was the Tizon Empire's primary goal throughout the campaign.

After heavy losses in initial attacks, the Aesirist worlds created a more closely aligned strategy and began to fight a grim defensive campaign. This dragged on for over a century, until the defence of Hrunting was finally broken by Tizon forces in 575. The remaining three worlds were overrun by 578 and annexed as part of the Tizon Empire. Integration went well enough on Hrunting; less so elsewhere. Victory over Aesirist worlds potentially increased the power of the Tizon Empire but before the resources of the new conquests could be harnessed the empire was overtaken by events elsewhere.

WORLD NAMES

The names chosen for planets and other bodies within the Sword Worlds region were drawn from Terran history and mythology. Initially, major worlds were all named for famous swords but over time other conventions were applied. Some worlds changed their names on one or more occasions, typically after a conquest or revolution. It is conventional to use the modern name throughout historical documents for the sake of clarity, at least when creating an overview of the region's events. Detailed accounts of a given world's history may indicate what it was called at any given time.

THE RISE OF THE SECOND DOMINATE

The 500s were a troubling time for the Sword Worlds. With Tizon embroiled in a long war with the Aesirist worlds and the possibility of Aesirist uprisings elsewhere, the situation in the coreward end of the region was uneasy at best. At the same time, the Third Imperium was expanding across what would become the Vilis subsector. The Sword Worlds knew the Imperium was extremely powerful, although they did not realise just how enormously they were outmatched at that time. Imperial expansion was seen as both threat and insult, since the spinward-rimward corner of Vilis had always been seen as 'part of the Sword Worlds but for the taking'.

Now a foreign power had the effrontery to annex these worlds and many within the Sword Worlds were angry about it. Unfortunately, anger did not translate to the ability to do anything about it. The Tizon/Aesirist war might have prevented conflict between the Sword Worlds and Imperium, as that the combat zone blocked access to Vilis and absorbed the full efforts of those worlds with the strongest incentives to oppose Imperial expansion.

During the same period, in 489, the Darrians demonstrated their Star Trigger weapon. Based upon the experiment that hurled the Darrians back to the stone age once before, this weapon caused no little alarm among the Sword Worlds. Some advocated immediate destruction of the Darrian fleet and invasion of their worlds but there was no practical way to ensure the weapon would not be used in the event of war. The Darrians did not threaten its use, at least not directly, but conflict had always been a possibility and the Sword Worlds had to assume a willingness to use the Star Trigger once it had been weaponised.

By the end of the 500s, the Sword Worlds region contained several small interstellar polities. Gram and Sacnoth each had a sphere of influence, as did the Dyrnwyn Compact and Kingdom of Sting. The Double Monarchy of Anduril and Narsil was at that time in a relatively solid alliance with Sacnoth, which had produced an effective joint naval command, and the Tizon Empire was also gaining in power. It was the navies of these polities that created the nearest thing the Sword Worlds had seen to a single power bloc; a junta of admirals building a naval confederation over-arching the political structures of the Sword Worlds.

The confederation was led by the admirals, with governments of the Sword Worlds trailing behind with varying degrees of reluctance. The initial intent may have been to wrest control of Vilis from the Imperium but there was little prospect of success. Still, the admirals had to do something; they had essentially staged a coup and now needed successes to justify and consolidate it. The decision was taken to invade the Entropic Worlds. At the time the Imperium and Zhodani were involved in what would become known as the First Frontier War. Although not directly related to that conflict, Sword Worlder actions drew them into it as part the 'Outworld Coalition' as Imperial historians call it.

Lying at the end of the corewardmost of the two 'Sword Arms' as they were sometimes known, the systems around Entrope were a logical addition to the Sword Worlds. Using intervention in a civil war on Entrope as a pretext, the Sword Worlds quickly overran the four target systems of Winston, Anselhome, Torment and Entrope – where they were greeted as liberators. Darrian forces in the region put up an unexpectedly stubborn resistance, assisted by Aslan *ihatei* who had been promised land in return for military service. Some of this land was on the Entropic Worlds, contributing to a much more difficult campaign than had been planned for.

The Darrian Confederation sought an alliance with the Imperium but despite concerns about Imperial intervention this changed little in the short term. By 604 the Darrian Confederation was forced to accept the loss of the Entropic Worlds. The Sword Worlds admirals wisely took the victory they had gained instead of pushing for more and agreed a peace deal, then turned their attention to internal affairs, announcing a re-establishment of the Sacnoth Dominate under the title Second Dominate. This gave the confederation a degree of legitimacy and a claim to power over the whole of the Sword Worlds region but in practice the Second Dominate was a rather loose and ramshackle affair.

It ran into trouble almost immediately, with Tizon refusing to accept the position of Narsil, Gram and Sacnoth as 'first among equals' with a power of veto over all policy. The fleet moved to enforce the will of the Dominate, at which point Tizon (and its navy) began a campaign of armed resistance. The fighting lasted three years, ending only when Tizon was occupied. Its possessions joined the Dominate, with Mjolnir and Gungnir switching back to their Aesirist names.

The Imperial Civil War, which broke out in 604, offered an opportunity to grab control of Vilis. Initially the Second Dominate was not in a position to do more than lay plans and rebuild its fleets but in 615 it joined a new Outworld Coalition as the Second Frontier War broke out between the Imperium and Zhodani Consulate. Intelligence gathering and careful planning

SWORD WORLDS
LATE 400S – EARLY 600S



over the previous decade allowed a well-orchestrated opening to the campaign and Sword Worlds fleets drove into Vilis with assault ships following behind.

The campaign was initially successful, with the Imperial subsector capital at Vilis captured in a ground assault on key cities and installations. However, while the Imperials struggled to deal with Zhodani advances the relatively light forces available to Vilis command were highly successful against the Sword Worlds. This was partly due to the strategy of Admiral Zaitov, the local Imperial commander, although the technological superiority of Imperial vessels was also a major factor.

Concluding a peace agreement with the Zhodani, the Imperial Grand Admiral of the Spinward Marches – Arbellatra Alkhalikoi – took her fleets to the Imperial Core and brought the Civil War to an end. Meanwhile the Sword Worlds could not make headway against even the light forces left behind. Several worlds were captured and occupied by Imperial forces, with the remainder of the Sword Worlds fleet destroyed in a valiant but hopeless action over Narsil. Even then, the last admiral of the Second Dominate, Denisov, retreated from Sword Worlds space to carry on a campaign of harassment.

Denisov established a secret base of operations at Bowman and over the next seven years conducted a brilliant campaign of raiding. His dwindling force was eventually defeated at Mertactor, although Denisov himself was never confirmed among the dead. Although defeated and in some cases under occupation, the Sword Worlds refused to consider surrendering the Entropic Worlds and eventually the occupation became too costly for the post-Civil War Imperium. A negotiated withdrawal from the Sword Worlds left them still in possession of the Entropic Worlds and the Second Dominate more or less intact. Sword Worlds histories consider the Second Frontier War to have been a victory – of sorts – for their people; one won by stubborn endurance and refusal to quit as much as force of arms.

The Second Dominate almost became a central Sword Worlds state with its capital on Sacnoth. Control over essential functions and installations was increasingly centralised to the point where the Dominate's power looked unassailable. Appearances were deceptive, however. In 698 the Dominate government on Sacnoth attempted to ignore a veto implemented by both Gram and Narsil, resulting in a rapid collapse of the Dominate as those worlds resisted and gained the support of other members. This resulted in the Gram Coalition becoming the main force in Sword Worlds politics for the next century.

The Gram Coalition did not try to exercise the same degree of centralised authority as the Second Dominate, which allowed it to remain in power until 788. Its fall was due to external circumstances rather than infighting. Renewed conflict with the Darrians resulted in the wholly unexpected loss of Entrope, followed by a collapse of the Gram Coalition. From the resulting furore of highly-charged political rhetoric and sabre-rattling emerged the Trilateral Alliance of Narsil, Sacnoth and Durendal. Too shaky to undertake a campaign of reconquest, the Alliance struggled to develop into a coherent interstellar state and fell apart in 848. The interregnum that followed before today's Sword Worlds Confederation emerged is considered to be the end of the 'old orders' and the beginning of the modern period of Sword Worlds politics.

THE MODERN CONFEDERATION

The Trilateral Alliance disintegrated in unspectacular fashion, with a gradual loss of control and influence accompanied by little conflict. The decline was accepted with a degree of fatalism by most leaders and for a time the governments of the Sword Worlds tended to look to their own affairs rather than forging alliances or attempting to extend their territory. Most worlds were independent or tied to loose alliances of two or three systems. During this period, the world currently known as Margesi (Isenfang for much of its early history) became a client state of the Third Imperium.

The acceptance of Margesi into the Imperial sphere of influence, which took place in 849, may have been a factor in the resurgence of interest in wider politics. Gram led a move towards the creation of a Sword Worlds Confederation, although the capital was placed at Joyeuse to avoid alienating those with anti-Gram sentiments. It is widely believed that the initiative was supported by the Zhodani Consulate, something denied by official Sword Worlds histories of the era.

The new Confederation began as a loose alliance but power was gradually consolidated on Joyeuse. This caused resentment in some quarters but since its policies generally favoured the bigger players in Sword Worlds politics the situation remained stable. This changed in 978 when Sacnoth decided to secede from the Confederation, citing excessive interference in its affairs, and several worlds went with it. A wave of anti-Confederation sentiment caused the governments of Gram and Narsil to collapse, replacing them with officials more focussed on their homeworlds than the Confederation. A revised Confederation Charter emerged from the crisis, emphasising the rights of individual

member worlds over the Confederation as a whole and the capital was moved to Gram. Margesi (Isenfang) was persuaded to re-join the Sword Worlds in 983.

The internal troubles of the Sword Worlds Confederation made participation in the Third Frontier War of 979-986 impractical, although small contingents of 'volunteers' raided Imperial worlds and harassed the Darrians. This caused some diplomatic problems but the emergence of the new Confederation allowed them to be smoothed over. A few groups had to be brought to heel by military action, which the Confederation as a whole found distasteful. These incidents sparked several dissident movements, all minor but most highly persistent. Some are still active.

The raiders were seen as heroes by many Sword Worlds citizens, especially those suffering unpleasant conditions in the industrial centres of Gram, Narsil and Sacnoth. At the same time, the ruling elite lost the confidence of a large segment of the population. This was not least due to a series of scandals and revelations of corruption in government. The result was a wave of social change throughout the Sword Worlds, based around the idea of a return to the old values of the colonisation period. In reality the populace had embraced an idealised vision of that time, coupled with a distorted and romanticised vision of the Norse and Germanic peoples of Old Terra. Individual endeavour became increasingly encouraged but only among men. Women were pressured to take up what were considered traditional female roles. This was not without strong opposition but over time Sword Worlds culture drifted into the form it currently takes.

The new form of the Sword Worlds Confederation was looser than the original and more agreeable to its members. As a result, there was little opposition to the decision to enter the Fourth Frontier War in 1082. Naval forces contributed by many worlds were placed under the control of the Confederation and an unusually coherent attack launched into the Entropic Worlds. Anselhome, Entrope and Winston were taken, although a Darrian counter-offensive captured Cunnonic. Peace was agreed between the Imperium and the Zhodani Consulate in 1084 but fighting continued between the Darrians and Sword Worlds for many months thereafter.

A state of tension has existed between the two states ever since and despite a formal peace agreement there are many who consider conflict is inevitable sooner or later. Intelligence gathering and prepositioning missions are carried out intermittently, with both sides attempting to disrupt the activities of the other. This generally takes the form of small clashes that can be passed off as criminal or non-sanctioned activities, although there have been some more serious incidents.

At the present time a civil war is raging on Joyeuse. Several times since it broke out in 1098 the conflict has begun to die down and hopes raised of peace. However, an ever-shifting array of factions seems to produce new centres of conflict every few months. The world is currently blockaded by the Confederation navy, with access strictly limited. Despite this, there are accusations that humanitarian aid convoys are being used to supply warring factions and that ships are sometimes allowed to slip through the blockade with cargoes of arms and ammunition. Accusations of favouring one group or another have threatened both the cohesion of the Confederation and trust between naval crews.

LANGUAGE AND SPEECH PATTERNS

The language of the Sword Worlds is known as Sagamaal, ultimately derived from Icelandic as spoken on Terra at the dawn of spaceflight. It has, however, been heavily altered by a cultural drift both forward and backwards. Additional words, idioms and speech patterns were introduced by non-Scandinavian personnel aboard the exodus ships, with the result that today's Sagamaal includes influences from the Germanic languages and northern Europe in general. The link to ancient Terra goes deeper than linguistics, however.

The search for a new identity among Sword Worlds colonists, along with a deliberate programme to foster one, resulted in a strong interest in Norse, Germanic and Anglo-Saxon culture of pre-spaceflight Terra. Ancient sagas and poems are still recited to this day, in something close to their original tongue and this ensured that old words and idioms remained in use with habits of pronunciation.

Among the holdovers from these ancient works of literature are kennings; figures of speech used to help a saga or poem rhyme. These have been adapted over the years to suit a spacefaring society but their origins are clearly apparent. A generous man might be 'the enemy of gold', whilst a famed sniper might be described as 'bearing his far-reaching spear' in a traditional tale. Anyone referring to a starship as a 'mighty star-steed' – other than when hamming up a stereotype at the expense of outsiders – tends to meet with howls of derision but traditional kennings find their way into Sword Worlds speech.

The end result is a form of Anglic spoken with a Scandinavian/Germanic pronunciation and accent, often

littered with archaicisms from classical Sword Worlds literature. The latter tends to be a hallmark of the upper echelons of society, while those without a classical education tend to speak a lot more like Imperial citizens, albeit with a very different accent.

THE LOST SHIPS

Some of the ships that carried the Sword Worlds to their new home never arrived or were lost during a subsequent transit to bring additional colonists. Most have met with a destructive fate and been lost with all aboard, however it is possible that some did make planetfall somewhere. Sword Worlds explorers search for clues to the fate of these vessels and the people aboard, both with physical wreckage and traces of habitation. Questioning local populations about their beliefs occasionally turns up a similarity to current Sword Worlds culture, suggesting a possible influence worthy of further investigation.

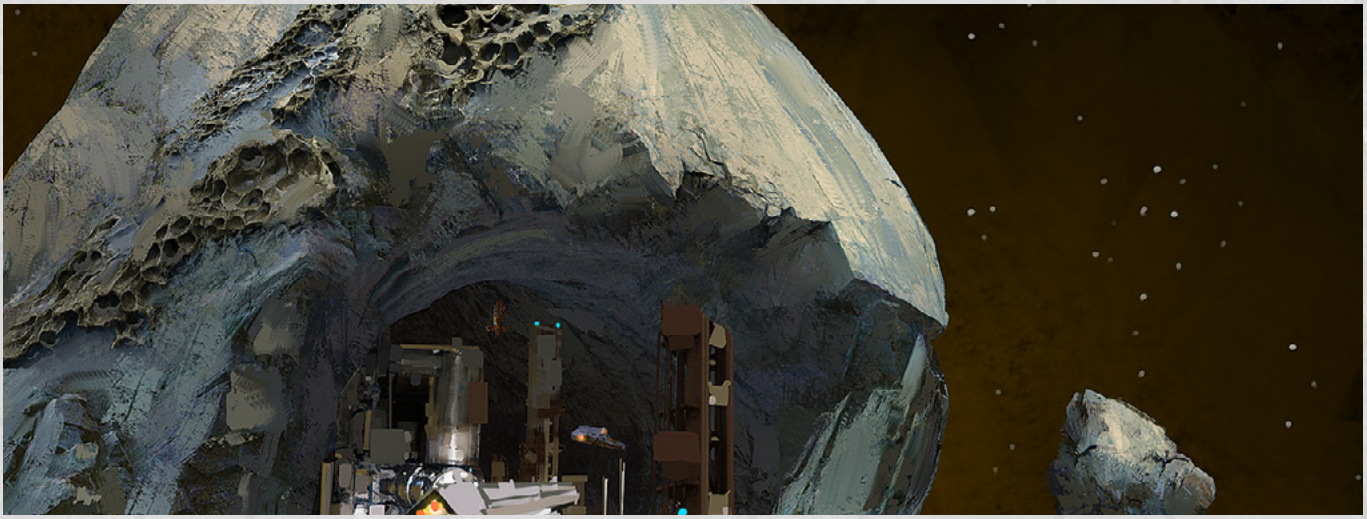
In most cases these similarities are due to a common origin on Old Earth that has nothing to do with the *Gram* exodus. However, there are a few enclaves that seem to have been influenced by survivors from the transit. Wherever possible, Sword Worlders try to learn more about these people, in part because caring for kin is an essential part of Sword Worlds culture and partly for political reasons. A population descended from the original colony mission could be considered to be part of the Sword Worlds culture, giving the Sword Worlds a toehold on that world. Most societies are dismissive of this idea but here and there interest has been piqued sufficiently to allow a diplomatic mission to be established.

A few of the more famous 'lost ships' are the subject of great speculation and active, if intermittent, searching. Of these, the cruiser *Robert the Bruce* is the most famous. There are several definitive versions of what happened to this vessel, each believed (or maintained) to be the absolute truth by a segment of the population but in truth the fate of *Robert the Bruce* remains unknown.

The most likely explanation is that the vessel was crippled or destroyed by enemy action on her journey or perhaps close to Old Earth Union space. She may still be drifting in space or downed on some distant moon. A drive failure may have stranded her somewhere. There are also persistent claims that *Robert the Bruce* either turned aside from her journey to fight some new foe or that she made an epic death-ride against the victors of the Ole Earth Union civil war to forestall pursuit. The latter appeals to the Nordic sense of doomed heroism but seems highly unlikely, especially since records are now available from that era and there is no mention of such an event.

Other vessels have gone missing over the years. A large colony transport is known to have crossed Aslan space but never reached Gram. This ship was crewed by volunteers who returned home to pick up those wanting to relocate and may have misjumped late in her voyage. The descendants of the survivors could still be alive if they reached a habitable world but thus far no signs of them have been located. Another, much better equipped, colony ship was lost after making a few jumps to spinward.

This vessel, named *Sacnoth* was carrying exiles from its parent world after the fall of the Sacnoth Dominate. Those who could not accept defeat were offered the chance to leave and set up their own colony far away. The loss of this vessel caused accusations of foul play to be thrown around but has never been proven to be anything but an accident. Indeed, there are those who believe that *Sacnoth* deliberately diverted from her intended course in order to cover her tracks and that somewhere there is a hidden Sword Worlds colony developing in isolation.



CHAPTER TWO

THE SWORD WORLDS

There are significant differences between the cultures of the Sword Worlds but more similarities – at least, to an outside observer. Imperials can easily assume a citizen of one world comes from another, which can be seen as insulting by a Swordie, for several reasons. Some worlds have a historical antipathy for one another or consider their people to be just plain better, which can lead to a Sword Worlder taking offence. In some cases the insult is wider in scope, along the lines of 'those damned Impies can't even tell us apart!'. Either way, the differences between Sword Worlds societies are important to their members and outsiders would be wise to look beyond stereotypes to see what kind of people they are really dealing with.

POLITICAL ASTROGRAPHY

The astrography of the Sword Worlds region has to some extent shaped its internal and external politics. The Sword Worlds lie on the Spinward Main, connecting them to the rest of the Spinward Marches by way of transit through the Metal Worlds (Iron, Mithril, Bronze and Steel). These are claimed by the Confederation as 'reserve worlds', to be developed when the need arises and their lack of high-quality starports has always been a barrier to movement – and not just for Sword Worlds vessels.

The Metal Worlds create a gap in the chain of starports linking District 268 to Lunion and the rest of the Spinward Main, which in turn has curtailed Imperial expansion in that direction and also contact with the Darrian Confederation. Transits are still possible, of course, especially by vessels capable of jump-2 or better performance but the constant flow of jump-1 traffic seen elsewhere is greatly reduced by the decision not to develop the Metal Worlds.

This may not be coincidental. Sword Worlds planners have long understood their confederation risks being wholly surrounded by Imperial territory and would prefer to stave off that day as long as possible. Since Imperial expansion is driven by economics for the most part, an interruption in the easy trade route offered by the Spinward Main acts as a brake on expansion in the areas beyond. Imperial corporations have repeatedly tried to get the Sword Worlds Confederation to open up the Metal Worlds by offering to build ports but so far their efforts have been rebuffed.

The Metal Worlds allow easy access for Sword Worlds ships into the Lunion subsector and District 268 and this, along with their value to the Imperium, makes them hot political property despite them being of little economic value. A war that ended with one, or more, of the Metal Worlds ceded to the Imperium would be a major turning point for the Sword Worlds Confederation; a factor that guides strategic thinking in the region.

The five star systems running directly coreward-rimward from Biter to Dyrnwyn have been collectively known by many names during the history of the Sword Worlds. Today they are commonly referred to as the Trailing Worlds, although some of their inhabitants manage to find that insulting. The Trailing Worlds, as a result of local astrography, are subject to different political and economic factors and sometimes considered independently rather than as part of a zone.

Sting and, particularly, Biter are associated with the Metal Worlds and sometimes grouped with them in astropolitical terms. Traffic from Imperial space into the Sword Worlds comes through these systems, resulting in greater cultural interplay than elsewhere – not always in a good way. Meanwhile Hofud, Durendal and Dyrnwyn are separated from Imperial space by a two-parsec gap in most directions. The only exceptions are the low-value systems of Arba and Tavonni. There is little contact with non-Sword Worlds through these systems and strategically they are in a difficult position.

Sword Worlds naval forces based at Dyrnwyn might pose a threat to Lanth but given the low jump capability of most Confederation vessels, the ability to project power outside the Sword Worlds is low. The Imperial vessels just across the 2-parsec gap at Adabicci are quite capable of striking into the Confederation with little prospect of a reply, so these systems are considered a defence and response zone where an initial Imperial thrust would be met and countered.

The Sacnoth Arm is considered by most to run from Sacnoth to Narsil, although naturally a case is made for it to include Beater and even Hofud. With a three-parsec gap to rimward and trailing, there is little merchant traffic in and out of the Confederation through the Sacnoth Arm; most commerce is internal. Strategically, Narsil is seen as a bastion against Darrian attacks or a possible Imperial strike from Flammarion

POLITICAL ASTROGRAPHY OF THE SWORD WORLDS



but overall the Sacnoth Arm is the most secure region of the Sword Worlds – at least in terms of external threats.

The Gram Arm is normally considered to run from Tizon to Tyrfing, although many attempt to include Beater and Sting. Contact with the Darrian Confederation comes mostly through Tizon, with levels of trade varying according to the political situation. Hrunting is sometimes considered to be part of the Gram Arm and sometimes part of the Gungnir Spur.

The Gungnir Spur contains the worlds of Gungnir, Mjolnir, Margesi and (sometimes) Hrunting. All four were major centres for Aesirism in the past and have a larger percentage of devout Aesirists than most other Confederation worlds. The Spur is sometimes considered to be associated with the Gram Arm and is certainly subject to influences from its worlds but has a different cultural flavour and political requirements. The worlds of the Spur see a modest amount of jump-2 trade with the Imperial worlds of Vilis to coreward. These are rather isolated from the rest of Imperial space, making Sword Worlds goods more valuable there due to lack of other imports.

The Entropic Worlds of Anselhome, Winston, Torment and, of course, Entrope are generally considered to be Confederation possessions (or claimed worlds that have been lost and will someday be regained) rather than a true part of the Confederation. These worlds have a very different culture to the Gungnir Spur or Gram Arm and are not players in Sword Worlds politics to any great degree.

These six regions; the Metal Worlds, Trailing Worlds, Sacnoth Arm, Gram Arm, Gungnir Spur and Entropic Worlds are at best very broad generalisations. It is the nature of Sword Worlds society that one system tends to be very different to the next, so these astropolitical influences are only a part of the complex interplay of factors that shape the society of individual worlds.

SOCIETY

Sword Worlds society is, for the most part, highly militarised. This takes a slightly different form than elsewhere, as militarism is an expression of deeper factors rather than an end in and of itself. Many attitudes stem from an understanding that those who are weak often become victims of the strong. To be able to protect its people a society must build strength – but there are many forms of strength and military power is just one of them.

Mutual trust is highly important in the Sword Worlds. Honourable actions build trust by demonstrating the individual is worthy of it and by rewarding those who give it. The average Sword Worlder is likely to 'do the right thing' even when there is no probable gain. This is partly for ingrained social reasons and partly self-interest – it is not possible to know whether any given deed will come under scrutiny or have unexpected consequences, however if an individual has acted honourably there is a strong likelihood that the outcome will be positive or at least neutral. A revealed misdeed, on the other hand, can bring disgrace.

Many social conventions are based around building a strong and resilient society. There are rules governing interactions between individuals and groups, creating a stratified yet egalitarian society. This concept often baffles outsiders from cultures where rich and poor, powerful and ordinary people do not mix, although to a Sword Worlder it makes perfect sense. With rules in place to protect the structure of society, everyone knows how to behave and where the limits are. There is thus no reason for an unskilled worker not to be friends with the planetary president – the rules limit the outcome of their interactions and may place some topics off-limits but this does not stop them spending time together as friends.

There are formal rules for expressing respect for both status and achievement. Sword Worlders tend to be very proud of who they are, what they have done and what they belong to; not always in that order. Those who express proper respect are rewarding a Sword Worlder for being a productive member of society, which in itself is a source of pride. Outsiders might see this as feeding another's already inflated ego but this process of respect given and returned is an essential part of a strong society.

Most Sword Worlders are aware that outsiders do not know the rules, and will sometimes be unintentionally rude, but there is a limit to how much allowance is made. Failure to challenge a lack of respect is an acknowledgement that it is not due and this can lead to diminished status. Someone who knows how to properly express respect and does not is being deliberately rude and possibly trying to provoke a fight; some Sword Worlders might not realise an outsider is making an honest mistake. Others might choose not to see it that way or develop a general contempt for non-Swordies as boorish ruffians.

The core belief of Sword Worlds society is that everything is a two-way street. An individual is proud of his achievements and chooses to make those achievements on behalf of a society he respects. Society as a whole (or its other members) respects his talents and the choice he has made in using them on its behalf. The work done by a farm labourer is valued by the corporation owner who ships his produce to market, as without it the corporation would have no goods to move.

An individual who works hard, speaks the truth and treats his neighbours with respect can rightly say that he has contributed to the greatness of his society as a whole and he can expect his contribution to be valued.

Gender is a subject that confuses many outsiders. The stereotypical Sword Worlder is a male chauvinist with a tendency to be patronising towards females but this is not quite correct. There are indeed strong gender roles in Sword Worlds society and female children are guided towards 'female' occupations involving little risk. However, it is recognised that some women do not want such a life and, on the whole, it is possible for females to enter any occupation they please. There is officially no upper limit on advancement, although in practice it is unusual to see women in very senior positions outside 'safe' occupations.

A woman who does enter a 'male' occupation expects to be treated no differently than a male counterpart and in practice this is generally true. Females are expected to act much like males – which might be better phrased as 'a female soldier is the same as any other soldier'. Mannerisms and attitude tend to be much the same among all Sword Worlds personnel, regardless of gender, and a woman who has chosen to join a 'male' profession is as likely to be respected for her choice as to encounter prejudice.

Thus a Sword Worlds negotiator who is rude to a female Imperial Navy captain will probably be doing so because he does not like 'Impies' rather than allowing his gender prejudices to show. However, there is one area where there is no compromise – children. A woman who becomes pregnant must leave a hazardous occupation and working mothers are rare. Sometimes a parent might work part-time but children always come first. It is here that the reality of the Sword Worlds preoccupation with gender becomes apparent – it is not about men and women but the children.

The first colonists who arrived on Gram faced an uncertain future. They were relatively few in number and there was no prospect of help. The ability to raise large numbers of healthy, well-educated children was vital to the survival of the early colony, so this attitude has never changed. Indeed, it could be argued that all Sword Worlders attitudes stem from a desire to protect their children, whether by defending their homes or ensuring they grow up with a parent around to take care of them. The protective attitude towards women is, in part, a need to protect society's ability to produce more children.

Another theme that runs through Sword Worlds culture is the ideal of 'straightforward and worthy'. This is enshrined in everything from personal behaviour to popular cuisine. Sword Worlders, on the whole, favour food that is simple and tasty over-elaborate 'cheffy' concoctions presented with painstaking precision. This contributes to the stereotype of Sword Worlders being rustic and dull-minded but to a Swordie there is artistry in cooking a good piece of meat just right so its quality stands for itself and adding needless frippery to the plate detracts from the overall value of the meal.

The same applies to a person's behaviour. Good manners and proper respect are important but needless or empty social rituals are a waste of time. If an action serves a useful purpose then it is worthy; if not then at best whoever is doing it is just wasting everyone's time. They may be scorned for adopting pointless or undeserved airs and graces. A person need only speak the truth and let their deeds stand on their own merit; there is no need to embroider the tale unless the intent is to entertain and amuse.

Sword Worlds advertising is a good example of their culture. Foreign advertising executives decry the lack of imagination and subtlety but slick, clever, indirect campaigns typically make Sword Worlders wonder what is wrong with the product. Rather than presenting images of attractive young people having a wonderful time with the product, a typical Sword Worlds advert has a well-respected individual drink some beer and announce 'Yeah, this is good'. 'I've got one of these' is the single most effective advertising slogan in the history of the Confederation, although only when stated by someone the viewer respects.

Uncomplicated devices are also favoured. Most equipment and personal electronics is manufactured to do a few jobs well rather than to have an enormous range of applications the average user will never require. A Sword Worlder will not pay extra for features they did not ask for, no matter how impressive the specification of the device, but will place high value on an item that reliably does what they need under the most difficult conditions. This to a great extent sums up what Sword Worlders value most – dependability, trustworthiness and a lack of needless complications.

MONEY IN THE SWORD WORLDS

Each member of the Sword Worlds Confederation is permitted to create its own currency. Some do, as do some organisations, which prefer to limit their employees' spending power in the company shop. However, most use the Confederation Soldat (St). Soldats are named from ancient Latin rather than a Germanic or Scandinavian language but the choice of this name is logical.

In ancient Rome, a soldat was 'a piece of money' and professional fighting men were paid in cash rather than reviving support and benefits in the way tribal warriors were. The term 'soldier' essentially means 'warrior who is paid in money' and since the original Gram colonists were soldiers it made sense to name their new currency after those who used it.

The Soldat is universally accepted throughout the Sword Worlds, at a value determined by the main financial and commerce centres. Conversion to local currencies, if they are in use, is easy. Soldats are also easily convertible to Imperial Credits along the borders, except in times of great tension. Exchange rates vary but conversion is simple enough that a Traveller's funds can be tracked in Credits for convenience.

LAW

Each Sword Worlds government makes its own laws, which differ from one world to the next. However, there are many factors in common. The original body of law used by the colonists of Gram was a military code, which covered common situations but made no provision for business transactions or corporate legal problems. These were addressed on an ad-hoc basis as the population grew, and the need arose, but eventually it was necessary to create a whole set of laws to govern these activities. Over the centuries world governments have amended, scrapped or added to these laws but their most basic precepts date from the first decades after the return to space.

Sword Worlds law can be divided into four major areas: Civic, Business, Political and Military. Civic law covers interpersonal actions and offences against society in general. This can be anything from common assault to failing to secure an airtight hatch properly. Military law is specific to military and naval personnel, and similar to civil law in many ways. Political law primarily governs interactions between governments and large corporations that have a lot of political influence but does touch upon individual subversive actions if these are of a sufficiently serious nature. Business law deals with large financial institutions and transactions.

Most Sword Worlds legal systems are derived from the same military code but this has evolved over the centuries into a set of civic duties to society and its citizens. Most crimes are considered damaging to society, rather than a specific individual, on the grounds that the individual is valued by society, which has a duty to seek redress and provide protection. Even in crimes where a person is directly harmed, the offence is considered to have caused damage to society, on the principle that 'one citizen is all citizens'.

Almost all offences are given a Soldat value, which is what the offender is deemed to owe the state. In the case of minor offences this can be paid in the manner of a fine but for more serious matters a percentage – up to 100% – must be worked off instead. Imprisonment is not in and of itself used as a punishment but as a means to make the offender pay off their debt to society. This can be achieved in various ways, with time served in a passive manner counting for the smallest Soldat value and forms of work accruing greater amounts per hour. Work gangs are often seen outside penal institutions, carrying out heavy labour or unpleasant but necessary work. This is never make-work – it is a fundamental right of all but the worst offenders to do something useful for society in return for rehabilitation.

Very serious offences are given a Soldat value that cannot be paid off in the offender's life span or subject to restrictions such that the offender will be in prison earning low Soldat values each day for many years. A few offences carry the death penalty and on some worlds it is permissible to request it as an alternative to lifetime imprisonment. This is seen as an honourable act, saving society the trouble of keeping someone too dangerous to release locked up for decades. A surprisingly high percentage of serious criminals eventually request the death penalty, reducing the disgrace they have brought upon their family to some extent, although there are those who accuse the authorities of deliberately driving offenders to what is essentially suicide in order to dispose of them.

It is also possible to request penal servitude in a military or non-military capacity. Numerous penal battalions exist, which are normally used for hard and dangerous tasks like road-building in a combat zone. Arming criminals is a risky option but the results are generally positive; the offender gets a chance to regain his honour and serve a short, dangerous and interesting sentence rather than rotting in a jail for years. Non-military penal service is often offered to those with expert skills. Doctors might be required to run a clinic in a deprived area where no other medical provision is available; an administrator might be required to help investigate corporate corruption. Penal servitude is usually at the request of the offender but occasionally imposed as a sentence.

Many who request servitude do so out of a genuine sense of remorse. For others it is self-interest, paying off the debt to society as quickly as possible. Sentences are higher for repeat offenders and opportunities to trade service are greatly reduced, although it is possible for valuable but wayward personnel to be in and out of penal units for most of their career and still leave the service with honour.

Business and political law have a personal dimension to them; managers and officials are personally responsible for the actions of the body they represent. Thus, a corporation might be fined a large amount of money or required to take action to make recompense but officers of that corporation will also face a personal responsibility, which could result in jail or penal servitude. A number of government 'employees' are high-end business managers implicated in corporate wrongdoing and required to serve the government for a period – usually receiving nothing more than a living wage while they do it.

Victims of crime are not neglected. Society has a duty to support and protect them, so rather than a victim suing the perpetrator for damages, compensation payments are set by law and made automatically. More importantly, a support system exists whereby medical and psychological help is available if needed, with automatic access for victims of crime. The process of redress is unofficially termed Weregeld, after the ancient system of compensation for killings used by the Norse peoples on Earth.

SOCIAL STANDING

Social Standing is similar in Sword Worlds society to elsewhere. Details vary from place-to-place but there are informal rules of equivalence and a general perception of social level common throughout the region. Certain titles are commonly used, whether official or not, derived from Scandinavian and North European tradition, although their meanings have changed over the centuries.

Social status is very important to Sword Worlds, since it reflects and dictates the respect they receive from others. SOC thus partly denotes the social level of a Traveller and partly the impression their peers have of them. As a general rule, SOC denotes wealth and property in general terms but is specific to status in the minds of other citizens. A poor labourer might have SOC 8 – much higher than his Imperial equivalents – if he is highly thought of, whilst a rich businesswoman might have SOC 2 if she has a reputation for dishonesty and unfair dealings.

The typical Sword Worlder has a picture of the social order based upon time-honoured concepts.

Outlaws are the lowest of the low, equating to SOC 0. An outlaw cannot hold property (although it can be held in their name until their outlawry is resolved) and has no status in Sword Worlds society. They are not protected by the law and therefore fair game for anyone with a grudge.

Thralls are indentured workers or individuals otherwise beholden to a master. There is no official definition of the term 'thrall' and it is more commonly used as an insult than social indicator – such as when a politician is accused of being a thrall to big business. In theory soldiers, indentured workers and even robots can be referred to as thralls but polite people use the term only for robots and those who have sold their integrity to a master for gain. There is no particular SOC associated with Thraldom.

Lagre Order (the 'Lower Orders') have no particular social class associated with them. Criminals, deserters, liars and disreputable drifters are lumped together under the lagre order. No matter how much land or property someone has, they can become part of the lower orders through dishonourable conduct. SOC 2 generally denotes this status.

Cottars are the poorest workers, with no significant property of their own. An honest cottar might have SOC 4 or more.

Carls make up the majority of the populace. Most common people belong to the carl class, with property or valuable skills to provide a good income. SOC 6 or higher generally indicates membership of the carl class, or an equivalent social status unaccompanied by the financial aspects.

Greve is the lowest noble rank, similar to an Imperial knight but much more common. Greve status is normally indicated by SOC 10, although this depends upon the reputation of the noble.

Jarl is the mid-level noble rank, although different titles are used elsewhere. Jarl status is normally denoted by SOC 11, although again this depends upon the individual's reputation. Like a greve, a jarl would normally be considered equivalent in status to an Imperial knight.

Hertug is the usual title for a planetary monarch. It would normally be denoted by SOC 12, the equivalent of an Imperial baron. Higher SOC is possible, reflecting public adoration and widespread respect, although this does not mean that a Sword Worlds hertug would be given the same status as a duke within the Imperium.

In areas not covered by a local jurisdiction or body of law, Confederation Law applies. This is an agreed compromise between the legal systems of all member worlds and subject to occasional changes. Installations and starships outside a member world's jurisdiction normally use a standard legal code to cover most likely eventualities – theft, assault and so forth – with more complex matters referred to the government of a member world or a touring representative. Legal experts are circulated among important installations on a semi-regular basis to hear complex cases if it is not desirable to move them to a nearby major world.

Military installations and naval ships follow Confederation Military Law and the standard code is essentially a slimmed-down version of this. It makes little provision for financial crimes or similar complex matters and is mainly concerned with keeping order on the frontiers. Larger installations normally have legal staff who can deal with such matters – or write up the case in sufficient detail to have it dealt with elsewhere – but for the most part someone caught embezzling in a minor installation will either be subject to ad-hoc local enforcement action or shipped off to be tried at the nearest major world.

RELIGION

Religion is a complex business in the Sword Worlds. The remnants of the Tizon Emperor-Cult linger on and there are many who embrace Aesirism as a religion in the common sense. Others follow the Church of Stellar Divinity and other more widespread faiths. The majority of Sword Worlders are not religious... at least, not as such.

There is a fine line between those who worship the gods of Aesirism as actual gods and those who embrace its myths as cultural heritage. This line is blurred by a habit of recounting tales of the Old Gods of Earth as if they were history, even by those who do not worship the gods. The deities are seen as culture-heroes who, along with various legendary and possibly even real figures, personify ideals, concepts or forms of villainy.

The majority of Aesirists are not devoutly religious; their gods straddle the line between history and myth, and most who revere them do so as a cultural act rather than faith in them as real deities. However, there are many who do believe, devoutly so, and they often despise the false faith of the 'cultural Aesirists'. Indeed, to many of the faithful those who have turned their gods into cultural icons are worse than people who simply do not believe in them at all. They see denial as misguided but honest, whilst the cultural Aesirists are guilty of perverting the worship of the true gods.

Thus a devout Aesirist might offer worship to Odin or Thor, whilst the cultural Aesirist tells tales about them as if they were historical figures. This attitude results in the Norse deities referred to as the 'gods-that-were'; gods who used to be worshipped and are now more like mythical heroes. A legendary sportsman from 600 years ago or an admiral in the early wars between the Sword Worlds colonies might be spoken of in the same way as Thor by a typical Sword Worlder but to a true Aesirist the difference is clear – gods are gods and famous mortals are not.

The gods and cultural heroes of the Sword Worlds tend to be adventurous and warlike. Explorers, entrepreneurs, traders and, of course, warriors are admired and many cultural or religious tales revolve around virtues like speaking the truth and facing bad odds rather than accepting dishonour. Curiously, however, clever deceit of those who deserve it is seen as acceptable conduct. Odin, whether as god or cultural icon of rulership, is a cunning individual who will set traps or manipulate his enemies as readily as facing them head on. Loki, the trickster and eventual villain of the Norse myths, is a useful member of the pantheon and at times the only one who can solve a problem.

Loki's powers of deception and misdirection aided the Norse gods in many of their adventures and clever tricks were sometimes the only way to deal with an enemy. The lessons of these tales are not lost on Sword Worlds commanders, who are on the whole entirely willing to deceive their enemies. This has become a tenet of Sword Worlds culture – friends deserve fair play; enemies must be confused and misdirected at all times. If a victory can be won fairly by force of arms, so be it but there is no shame at all in using the truth – or the lack of it – as a weapon like any other.

This does not in any way clash with the concept of honourable conduct, since deceiving an enemy is an acceptable part of warfare. A sportsman who cheats on the playing field will bring dishonour upon himself, since fair play is agreed by all parties as an implicit part of playing the game. However, no such agreement exists in warfare so deception is a legitimate tactic. There are rules about what constitutes a legitimate ruse de guerre and sometimes a promise to the enemy must be kept – for example an agreement on surrender conditions. However, an enemy can be honourably deceived and this is seen as good strategy. Odin himself was prone to confuse and mislead his enemies and this sort of cunning leadership is a part of Sword Worlds culture as much as being an honourable warrior or forthright friend.

GOVERNMENT

The governments of the Sword Worlds are autonomous members of a larger but rather loose state or alliance. They contribute an agreed amount of money and/or materials to the Confederation as a whole, along with units or quotas of personnel for Confederation, rather than local, organisations. Occasionally, a government threatens to secede from the Confederation, which can be disruptive. For this reason personnel are normally supplied en bloc, rather than several battalions, work crews or audit teams being fragmented. This is not always possible but the politics of the Sword Worlds is sufficiently complex that organisations plan for the sudden withdrawal of contributed personnel. Materiel and money, on the other hand, remain the property of the Confederation once contributed.

Government Types

The governments of the Sword Worlds more or less fit into the standard definitions, although local culture does create a number of differences from the norm.

Code 0: No Government

A no-government world could arise as a result of civil war or another temporary situation but this would not usually result in the world being reported as having the code Government 0. That code is normally reserved for worlds that have no local governmental apparatus on a permanent basis. Worlds with no government of their own are administered by the Confederation itself, through a local office at a nearby world.

At present Iron, Bronze, Mithril and Steel are the only worlds without permanent government in the Confederation and this is unlikely to change. Each is administered by a small team based on Biter, reporting to the Commissioner for the Metal Worlds whose office is also located there. Confederation Law applies on these worlds, even if they have no official government or population, although enforcement depends on whether suitable personnel are present. Confederation Law on a no-government world can be assumed to equate to Law Level 1–2, with many possible infractions simply ignored as irrelevant.

Code 1: Corporate

There is only one corporate government in the Sword Worlds Confederation, on Dyrnwyn. Whilst some corporate governments are a government first and foremost, Dyrnwyn's is very much a profitable enterprise first and last. This creates a different political outlook than many other worlds of the Confederation. Dyrnwyn's government is interested in commercial opportunities more than anything else and is amenable to deals with outsiders that other Confederation governments would not even consider. In Dyrnwyn's case, the corporate style of governance means that everything has to make a profit for the government – if a service is not profitable it is not provided and nothing is built unless it contributes to the economy.

Code 2: Participating Democracy

Democracy is represented in various ways within the Sword Worlds. Many people on worlds that do not officially have a democratic government would say – with some justification – that they still have a democratic say in government. Essentially, this is a recognition that any government that ignores the welfare of its people for long enough will be brought down by revolution and that good governance results in a constant reaffirmation of confidence and willingness to be governed. There is much truth in this but only a few Sword Worlds governments are democratic as such. Most citizens value their vote and use it regularly, not least as a statement of approval or disapproval of the current administration.

Code 3: Oligarchy

An oligarchy is entirely acceptable to most Sword Worlders providing there is a clear two-way street regarding obligations. A hereditary or selected ruling elite is expected to lead and rule with the best interests of the populace in mind. Citizens from oligarchies are often fiercely proud of their leaders, citing examples of self-sacrifice and tough decisions made in the common interest. There are so many tales of leaders personally joining a rescue attempt after a natural disaster or distinguishing themselves in military service before taking on the mantle of government that this is not seen as anything unusual. Conversely, a leader who does not find a way to demonstrate worthiness tends to attract adverse comment. This does lead to a somewhat reckless style of leadership and can be inefficient – anyone can dig through the rubble but it takes someone in a position of authority to coordinate the diggers. Overall,

however, Sword Worlds oligarchs are bound by stern duty to their people and raised from birth to both honour and fulfil those duties.

Code 4: Representative Democracy

Representative democracies in the Sword Worlds are in some cases obviously so and in others concealed by layers of special titles and apparently non-democratic institutions. On some worlds, officials are elected to their post by a round of electronic voting every year, then 'appointed' by the government in a manner that looks more corporate than democratic. Likewise the government is formed of individuals who serve for life (or until retirement) and are then replaced by others chosen by a body, which in turn represents segments of the population. Often this pseudo-democratic process goes on in a manner rhat does not look like formal elections seen elsewhere but reflects the will of the people through informal contact at each layer of representation. If enough citizens at 'ground level' pressure those who speak for them, changes will ripple up the structure without anything appearing to have happened – at least to an outsider.

Code 5: Feudal Technocracy

Feudal technocracy in the Sword Worlds is as varied as anywhere else. The basic principle is that individuals control technical aspects of society and wield power on behalf of their followers, although in practice the details vary considerably. In the Sword Worlds, the usual form of feudal technocracy is a council of leaders representing segments of the population. These might be quite varied; the elected spokesman of an agricultural cooperative, the head of the armed forces and a major corporation owner might all be considered technocrats in this sense even if their area of control is not technological as such. Feudal technocracies exist where all leaders are from the same fold, such as the head of the power-generation corporation, the owner of the starship construction yards and so forth. However, this is most common in young colonies or societies recovering from disaster or upheaval. In an old and developed culture like the Sword Worlds, many different types of leader can come to the fore. When the system worlds it makes use of the diverse strengths of the population. When it does not, cross-cutting agendas can wreck any well-intentioned scheme.

Code 7: Balkanisation

Balkanisation is the same in the Sword Worlds as elsewhere. Different government types may exist alongside one another and given the active nature of Sword Worlds politics it is not uncommon for a region to change governmental style overnight.

Code 8: Civil Service Bureaucracy

In most regions, a civil service bureaucracy implies a rather bland and stuffy form of government based on pen-pushing and bean-counting but this impression can be deceiving. 'Civil service' in this context refers to a government serving society rather than ruling it. During times of crisis, the military of the Confederation has imposed a civil service bureaucracy upon regions or even whole worlds, fulfilling necessary administrative functions in as efficient a manner as possible. More commonly Sword Worlds civil service bureaucracies are semi-democratic, with officials elected to posts or dismissed from them after a vote of no confidence from the populace. The latter can be an actual vote or, upon occasion, an 'intervention' in the governmental process by angry citizens. Those worlds with a civil service bureaucracy tend to have considerable input from the population, even if they are not democratic as such.

Code 9: Impersonal Bureaucracy

The impersonal bureaucracy is the converse of a civil service bureaucracy in the Sword Worlds. The ruling system or group has become entrenched, or at least the way of doing things has crystallised. As a result, the population has much less input in the process of governance and may be almost entirely isolated from it. This may or may not be acceptable – in some societies there is a habit of confidence in the government, whilst others are subject to increasing levels of dissent.

COMMERCE AND INFRASTRUCTURE

The infrastructure of Confederation worlds is typical of most starfaring cultures. The mainworld of a system typically has an orbital port, which is the destination of most commercial traffic, plus possibly smaller specialist highports. These are typically geared to bulk freight handling or trans-shipment of industrial goods and thus receive very few small vessels or passenger ships. Some member worlds maintain military ports to serve the needs of ground forces and most have one or more naval bases in the system. These may be part of a generalist port but more commonly are a combination of orbital fortress and system defence base.

Some worlds have a single main downport; others have several smaller ports scattered across the globe with no main groundside facility. These smaller ports tend to be a combination of gravport and spaceport, supporting local traffic as well as connecting nearby cities with orbital facilities. Planetside transport is usually by means of heavy rail networks for bulk cargoes and wheeled vehicles for personal mobility and light goods.

Commercial activity within the Confederation is intense, with jump-1 merchant ships plying back and forth along the Gram and Sacnoth Arms in an endless stream. Trans-border traffic is less common but large freighters as well as small transports provide a regular service to ports outside the Confederation – conflict permitting. In addition, the tradition of long-range merchant cruisers continues, with vessels often away for a year or more. These expeditions sometimes make a huge profit, sometimes not, but also gather intelligence on what is happening outside border zones and are considered worth the investment.

Most of the trade headed coreward into the Vilis subsector goes by way of Mjolnir or Hrunting; ships headed for the Zhodani Consulate also stage out of Hrunting. Narsil and Tizon are the gateways to Darrian space, when relations allow for trade; a fair amount of jump-1 traffic up the Gram Arm turns around at Tizon but many more daring captains continue their voyages into the Entropic Worlds or the Darrian Confederation.

Dyrnwyn is the home port for a large fleet of jump-2 trade ships operating between the Sword Worlds and Lanth or Lunion and, in many cases, far to trailing. Both routes typically involve transit by way of Arba, although some Dyrnwyn trade fleet vessels use the Metal Worlds to bypass Rabwhar. The majority of trade ships operating through the Metal Worlds into the Lunion subsector or District 268 are home-ported at Biter, however.

Thus Tizon, Narsil, Dyrnwyn and Biter are the main trade hubs for commercial traffic moving in and out of the Sword Worlds Confederation and are sometimes known as the ‘four corners’ or ‘four cornerstones’ of Sword Worlds interstellar commerce. Internal traffic is more evenly distributed, with almost every world having a large trade fleet. Gram and Sacnoth receive more traffic than other ‘internal’ ports, partly due to their location and partly as a result of political and economic factors.

EXILES, OUTLAWS AND REFUGEES

Exile and outlawry are common features in Sword Worlds myths and legends and, to some extent, part of modern society. Individuals beyond the reach of the law are sometimes declared outlaws; this can occur when the authorities simply cannot find someone, or when they are in a location beyond Sword Worlds jurisdiction. For example, a criminal might flee into a foreign embassy or take refuge in an independent installation whose operators cannot be induced to give him up. The solution is to outlaw the individual and allow events to take their course.

There are two grades of outlawry. One is temporary and partial; the other permanent and deadly. Normally outlawry is for a fixed period – one to three years is common. During that time the individual is forbidden to make use of any Confederation infrastructure or service – ships will not carry him, shops will not let him buy goods and he will be arrested if he attempts to pass through a port or similar secured area. However, an outlaw is permitted to name three places where he is safe and may travel between them under the normal protection of the law. This means he can and will be arrested but cannot be simply killed out of hand by. If he goes anywhere else or deviates from a direct route between his designated places, he is treated as a full outlaw.

This form of outlawry is highly inconvenient – to say the least – but not necessarily fatal. Someone outlawed in this fashion can stay off the radar or hide somewhere, and return to normal society after their period of outlawry is up. If they can be proven to have committed a crime they will be arrested and face judgement for it, of course, but it may not be possible to do so. A person accused of criminal acts who chooses to run rather than present themselves for judgement becomes an outlaw by definition. There are also certain circumstances under which a world government can declare a citizen outlawed.

The commonest use of this measure is to force individuals to face trial, or at least investigation, rather than hiding or stonewalling. A powerful figure with



good lawyers might be able to stall an investigation indefinitely or tie it up in courts using endless technicalities. They can be declared an outlaw without being proven to have committed a crime – although there must be solid grounds for suspicion – which will often force an end to the stalling tactics.

Full outlawry is more serious and usually more or less permanent. By definition, anyone found guilty of a serious offence and not complying with their sentence is an outlaw. A full outlaw is granted no safe places and no protection from the law under any circumstances. They can be attacked or killed by anyone, with complete impunity. Full outlawry may or may not be accompanied by a bounty but it is more or less a death sentence.

Exile is not quite the same thing as outlawry. Exiles are forbidden to return to a particular place, which might be a world or even the whole Confederation, but they are not outlawed as such. Exiles are still protected by Sword Worlds law even if they can never go home. It is used as a punishment by some world governments or can be accepted by a defendant in a form of plea bargaining. In this case the trial ends or is never begun and the individual quietly goes into exile. This is used as a way to keep scandals quiet; it gets rid of the wrongdoer without the need to prove them guilty or to make public facts that might be embarrassing to others. It is, of course, possible to be both exiled and outlawed. In this case it is only a matter of time before someone comes seeking vengeance or bounty.

Refugees sometimes have a nebulous status in the Confederation. By convention, citizens are the responsibility of their homeworld government and aided by other Confederation members as a courtesy to that government. There are rarely any formal obligations but it is rare for Sword Worlders to allow even their enemies to suffer needlessly. However, when refugees are no longer the responsibility of a government – having been declared exiles, lawfully or otherwise, or because the government has collapsed and been replaced – they can sometimes become a problem that is difficult to solve. Sheltering refugees seems like a charitable thing to do, and would be seen as honourable in most cases, but it might be construed as a hostile act by those who have driven the refugees out.

There is also the question of what state the refugees now belong to. If one of the other Sword Worlds governments is willing to take them – and they are willing to join it – then the problem is solved but if not the Confederation as a whole has to take responsibility. This can lead to an undignified parcelling-out of groups of refugees or a scramble to recruit the most skilled and avoid taking on those who might be dead weight or troublemakers. Refugees can become exiles of a sort, protected by Sword Worlds law but unable to return home or claim to be part of any member state. Historically, these dispossessed groups have suffered badly before eventually being absorbed into whatever state will take them or else turned to crime and violence to carve out a place to live.

What outlaws, refugees and exiles all have in common is that they are essentially stateless individuals. Refugees and exiles are entitled to the protection of the law; outlaws may or may not be. However, all three are still seen by outsiders as representing the Sword Worlds Confederation even if they are explicitly no longer a part of it.

CHAPTER THREE

THE SWORD WORLDS CONFEDERATION

The Sword Worlds Confederation operates on the basis of 'loyalty freely given', a rather romantic concept inspired by feudal ideas and distorted legends of Old Earth. The core ideal is entirely workable – leaders earn the respect of their followers, who choose to be governed by those they consider worthy. Loyalty is a two-way street and those who betray the trust of their people rapidly lose their power base.

This is perhaps the only way the people of the Sword Worlds could be governed, given their cultural attitudes, but it does lead to rather turbulent politics and occasionally rash decisions. The system rewards egotism and short-sighted decision-making intended to impress rather than further the common good. Sword Worlds leaders are notoriously stubborn, since admitting someone else was right might be seen as an admission of weakness.

Conversely, actions tend to be taken with great resolution and carried through to a finish. There is nothing half-hearted about a Sword Worlds initiative – half-baked, sometimes, but never half-hearted. It takes a lot to get the Confederation to overcome its internal divisions and general inertia but once it gets moving it is just as hard to stop.

GOVERNANCE OF THE CONFEDERATION

The Sword Worlds Confederation is more of a framework for cooperation than a government. Member worlds are, for the most part, self-governing. Those that are not are the territory of others and lack a vote in the Confederation Assembly. Each member world has one vote and all votes have equal weight. However, any action can be vetoed by Gram, Narsil or Tizon, or by unanimous vote of all other member worlds.

Votes are wielded by ambassadors acting upon the instructions of their parent governments, although as a rule ambassadorial votes are used to decide general policies rather than specific details. Most projects are managed by a staff answering to one of the Confederation Chancellors. There are Chancellors for Internal Relations and External Relations, Finance, Trade, Justice and Defence, all answering to the Chancellor of the Confederation. These appointments are voted upon by ambassadors and subject to extensive wrangling since a Chancellor has many opportunities to further the interests of his homeworld.

Governance proceeds downward from the Chancellors, who appoint officials to head projects or oversee aspects of their area of responsibility. Sometimes a Chancellery (as each area of responsibility is called) can be hamstrung by compromises; it is not uncommon for some worlds to oppose the appointment of a particular Chancellor unless his deputy is from a world they favour or trust. This can create divisions within the Chancellery that prevent efficient operations – although some would say what is being prevented is rampant favouritism and grossly unfair practices.

Given the inertia of the Chancellor system, many initiatives are put together outside the official all-Confederation governmental process. It is not uncommon for a group of world governments to band together in order to get something done and for most, or even all, of the rest to eventually join the project. At that point, it is usually voted into official being as a Confederation initiative. In this way the Confederation government is routinely bypassed by the more powerful world governments although it is always possible to organise a condemnation or outright refusal to permit an action. Whilst not subject to veto in the same way as official projects, any endeavour can be blocked by generating sufficient opposition within the Confederation as a whole.

The end result of this system and the usual means of bypassing it is a rather vigorous internal political situation, with much resting upon the personalities of ambassadors and Chancellors as well as the power of world governments. A tradition has arisen surrounding the 'honourable but secret arrangement', with accepted but unwritten rules for under-the-table negotiation and power brokering.

MILITARY AND PARAMILITARY FORCES

The Confederation maintains three military forces, informally referred to as the army, navy and patrol. Each has a primary area of responsibility, with some overlap. The army and navy are relatively small in peacetime, since most of their personnel and assets are contributed by member worlds. The patrol, on the other hand, is the exclusive preserve of the Confederation as a whole.

War Plans

It is widely acknowledged in the Sword Worlds military that no plan survives contact with the enemy and much of their strategy revolves around being that enemy. The Sword Worlds cannot hope to prevail against the technologically superior Imperium if they allow the course of war to be dictated. Plans thus emphasise deterrence, deception, strong defence of key points and the creation of risk. By ensuring the enemy knows leaving their line of communication unguarded risks attacks on their logistics tail, the Sword Worlds Confederation ties down large enemy forces in defensive operations – often protecting targets that will never be attacked.

Likewise, raiders causing mayhem far behind battle lines draw off many times their tonnage in escorts and hunting forces, or else cause damage that weakens the enemy economy and causes political embarrassment. This strategy of raiding is at the heart of Sword Worlds defensive thinking. When war is undesirable it deters aggression; when conflict breaks out it makes everything the enemy does that much more costly. The Sword Worlders know they can be crushed any time the Imperials so desire. Their strategy is to make that victory too expensive to even contemplate.

In any major war, the basic plan is for raiders to immediately cross into enemy space and start causing trouble – and also gather intelligence on enemy dispositions. Raids will put an enemy off-balance and disrupt operations whilst concealing the intentions of the Sword Worlds. Fleets will engage any incursion, reinforcing defensive formations in critical areas or providing mobile counterattack capability. These fleets, or perhaps others moved from other regions of Sword Worlds space, will then go over to the offensive.

The overall strategy is one of 'cloak and dagger, sword and shield', as the saying goes. Defensive forces assigned to the Area Commands, backed up by fleet elements as necessary, are the shield protecting the Sword Worlds, while fleets are the sword to counterattack invaders or create a threat to their bases. Heavy strike forces are the dagger that silences an enemy base or logistics concentration, with the whole strategy cloaked in a veil of pinprick raids and intelligence denial operations.

Sword Worlds ships lack the high strategic mobility of their Imperial opponents but are designed to operate on interior lines where distances are short, or plod relentlessly towards a target in overwhelming force. Sometimes this can be done as a feint, with a fleet allowing itself to be identified while heading towards an obvious target. When the enemy begins to pull in forces to protect its strategically important installation, the fleet turns back or aside. The 'cloak' of screening and raiding forces delays detection of this as long as possible. In so doing, the fleet has deprived the enemy of a large force without taking losses, gaining time for other fleets to win battles elsewhere.

Risk is an important factor in these plans. An enemy force cannot risk running headlong into the Sacnoth or Gram Fleets unless it has a clear advantage. If the Sword Worlds can deny the enemy reconnaissance data, or deceive them into thinking the Sacnoth Fleet is still at its moorings, its forces can attack elsewhere and move back into a blocking position before the enemy is sure it is gone. Many variants on this plan exist; all are based on bold but calculated moves exploiting an enemy's lack of clear information. Ensuring this information is indeed lacking is one of the most important missions of the Sword Worlds fleet.

THE INTERSTELLAR PATROL

The patrol can trace its origins all the way back to the earliest settlement of Gram. Its founding members were military police personnel and volunteers from among the colonists, who enforced the law and settled disputes among the outlying settlements. Over time the patrol grew into an interstellar organisation with multiple remits.

The primary responsibility of the patrol is law enforcement. Member worlds have their own police forces but the patrol handles crimes that transcend local boundaries. It also provides detachments to settlements that cannot support their own law enforcement personnel, either on a permanent basis or as a mobile force. The patrol has powers to arrest or suspend Confederation officials, which member-world police forces lack.

The patrol is paramilitary in nature. Personnel are well-armed and serve as light infantry at need, leading local volunteers in defence of a remote installation until the army arrives, or fighting a guerrilla action in a region

taken by the enemy. More often, the patrol deals with organised crime groups that may be heavily armed but not military in nature. Patrol personnel also act as bodyguards and security details for Confederation officials and installations.

The majority of the patrol's personnel are deployed in a policing, investigative or security role but it possesses a number of small warships, used for internal security operations and pirate-hunting, for the most part, and co-opted into naval forces at need. The patrol's boarding and landing forces are as well-trained and equipped as the spearhead units of the army, although their ship crews are not up to navy standards.

The patrol's investigative branch correlates information from many sources and employs large numbers of analysts, accountants, economists and theoretical scientists to create a 'big picture' of any region and zoom in on details as necessary. It is an open secret that the investigative branch is the Sword Worlds Confederation's strategic intelligence service. Both army and navy maintain intelligence apparatus, but this is specialised. The patrol's operations are both wider and deeper in scope, dealing with political, military, economic and criminal matters. Industrial and technological espionage are also within the patrol's remit, although it has never been very successful in obtaining information useful to the advancement of Sword Worlds technology.

The patrol is the largest of the Confederation's standing forces in peacetime, although it does not expand in the way the army and navy do when war threatens. It has a flat command structure, since it tends to be made up of large numbers of small detachments, task forces, local security details, investigative teams and a few starships. A common rank structure is used, based upon Germanic and Scandinavian traditions from Old Earth, but at most ranks there are multiple specialities. An investigative scientific assistant and security operative may hold the same rank but they have different skill sets.

All members of the patrol undergo common basic training, covering weapons handling, response techniques and communication protocols, among other core skills. No patrol member graduates without being capable of looking after themselves and contributing to emergency situations. Advanced training is then provided, which splits the intake into three streams. These are the broad divisions of the patrol, selection at this point indicates what direction a career will take. It is rare, but not unknown, to move between branches. This sometimes happens when a specialist officer is needed at a higher level or where there is a shortage in another branch. The three streams are Security, Investigative and Interstellar.

Security personnel operate at the 'sharp end' of the patrol's remit. Tasks range from acting as bodyguards for officials or securing government installations, to providing foot patrols in the manner of local police. The Security arm also handles hostage rescue and high-risk intervention – any situation where heavy opposition is expected. More senior personnel tend to develop a broader skill set and an understanding of how the other arms operate. It is common for a generalist Security officer to command a combined investigative/interstellar task force, which will include a significant Security element.

Investigative personnel are mostly detectives or specialists such as investigative accountants, forensic scientists, cryptographers and the like. Most of their work is in various criminal fields such as complex murder cases, multi-world crimes and corporate wrongdoing. However, the Investigative arm also maintains a web of informants – some overt, some less so – outside the Confederation and an intelligence apparatus to back it up. This is primarily concerned with keeping the Confederation's planners informed of large-scale developments and takes a broad-brush approach. Where naval intelligence operatives might focus on the capabilities of a new Imperial Navy cruiser or its deployment patterns, the Investigative arm also wants to know where it is being built, where components are sourced and which worlds benefit most from the contracts. Information of this sort is useful in long-term planning and when putting together peacetime initiatives to counter enemy strengths.

Interstellar personnel are trained as ship crews first and foremost or supporting portside skills. The Interstellar arm of the patrol undertakes crash investigations and similar tasks but is primarily concerned with enforcing the law in remote areas. It also provides crews for intelligence-gathering ships sent into Imperial, Zhodani and Darrian space, although the analysis teams carried aboard are normally from the Investigative arm.

Joint operations are common. For example, Interstellar and Investigative personnel might work together to penetrate a pirate network, after which a joint Interstellar/Security force will move in to break it up, passing intelligence gathered to the Investigative arm for analysis. Command of joint task forces will normally fall on a senior officer from whatever branch seems most suitable. This is usually a Security official who has progressed from mundane tasks undertaken by the lower echelons of the arm into a high-end generalist capable of putting the big picture together and acting upon it in an effective manner.

Ranks in the Patrol

All personnel have a paramilitary-style rank, which indicates their seniority and pay grade, but titles may be modified to indicate specialist areas of expertise. There is less of an enlisted/commissioned divide in the patrol than in the military; all personnel start as a kadet and progress through the ranks, gaining additional training as required. Those with a good educational background may progress faster but all members of the patrol are patrolmen first, specialists and commanders second.

Patrol Ranks

RANK	NOTES
Kadet-Rekrut	A Kadet-Rekrut is a patrolman who has not yet completed their basic training or probationary assignment.
Kadet	The majority of patrol members hold the rank of Kadet or Korporal. Kadet does not have the same connotations of 'trainee' in Sword Worlds use as Cadet would elsewhere.
Korporal	The rank of Korporal indicates an operative with significant experience; typically four or more years. Many operatives never rise to higher rank but become highly experienced in their chosen role.
Sergent	The patrol's equivalent of non-commissioned officers are Sergents, who normally lead small teams and support higher ranking operatives. Specialist scientists and administrators tend to advance quickly to the Sergent ranks and remain there for most of their careers.
Seniorsergent	Experienced mid-level leaders pass through the Seniorsergeant rank before taking charge of a larger team or subdivision.
Chefsergent	Chefsergeant represents a very experienced operative, suitable to lead a shift at a busy police station or head a forensics investigation team.
Konstabel	The original meaning of Konstabel in Sword Worlds terms was equivalent to a sheriff elsewhere; the senior lawman in a modest sized town or spaceborne installation. Konstabels are often assigned to lead an investigation or similar project involving up to 20 individuals.
Overhode	An Overhode, or Overseer, leads an important or large investigation, or the security force of an installation large enough to require more than one Konstabel and supporting personnel.
Leutnant	A patrol Leutnant is an important official in a large security or police force, or the head of an important task force. A Leutnant may also be a highly experienced investigator, scientist or specialist.
Overleutnant	The most senior Leutnents hold the rank of Overleutnant. Duties tend to be the same, with higher rank indicating greater experience or completion of training to move up to higher rank.
Kapiten	The patrol's Kapitens oversee security for major installations or segments of large cities, or head divisions of the local patrol force such as the scientific and forensics investigation service for a major city.
Oberstleutant	Oberstleutant is the patrol equivalent of a lieutenant-colonel in the army, commanding the patrol forces of a major city or region on a planet.
Oberst	Oberst is the highest rank most patrolmen can aspire to, commanding the entire patrol resources of a planet or equivalent, such as a major training facility or flotilla of patrol ships.
General	The commander of the patrol as a whole is given the rank of General, although their remit is very different to that of an army general – as are the resources at their disposal.

Starships of the Patrol

The patrol typically uses small multirole vessels capable of patrol and escort work when co-opted by the navy but unsuited to combat against more capable ships than a converted merchant-turned-pirate. They typically have a large crew capacity and carry Security arm personnel for boardings, interventions and emergency response. Patrol ships are crewed (and usually captained) by Interstellar arm personnel but the mission commander and specialist personnel might be from any arm.

Not all starships used by the patrol are overt or of specialist designs. The patrol uses a variety of vessels for intelligence gathering both within and outside the Confederation, typically common designs that do not stand out among other traffic, although some specialist overt and covert monitoring vessels are used. In recent years the Interstellar and Investigative arm have deployed exploration ships, leading to speculation that a specialist service might be spun out of the patrol either as a fourth arm or a wholly new body funded directly by the Confederation government.

THE DIPLOMATIC CORPS

The diplomatic corps has three primary functions; keeping the peace between member states, maintaining useful links with external polities and increasing the power of the Confederation through non-military means. None of these are particularly easy tasks but the internal affairs segment of the corps is sometimes known as Freyja's Charioteers in an oblique reference to the difficulty of their occupation.

In classical Norse mythology, the goddess Freyja possessed a chariot pulled by two cats. Less reverent Aesirists and students of mythology cite this as proof that she was the greatest of all Norse gods – anyone can fling hammers around or learn secret wisdom but getting two cats to go in the same direction is another thing altogether. 'Driving Freja's chariot' is the Sword Worlds equivalent of 'herding cats' and those who try to keep the Confederation from fragmenting over every trivial issue are familiar with the concept.

The diplomatic corps maintains embassies on member worlds, often in a cluster of diplomatic missions that also house ambassadors from other member worlds. In theory, the Confederation ambassador slightly outranks these single-world representatives and presides over their meetings. In practice, many Confederation ambassadors are prone to push the agendas of their homeworld or regarded as less than impartial despite the best efforts of the corps as a whole.

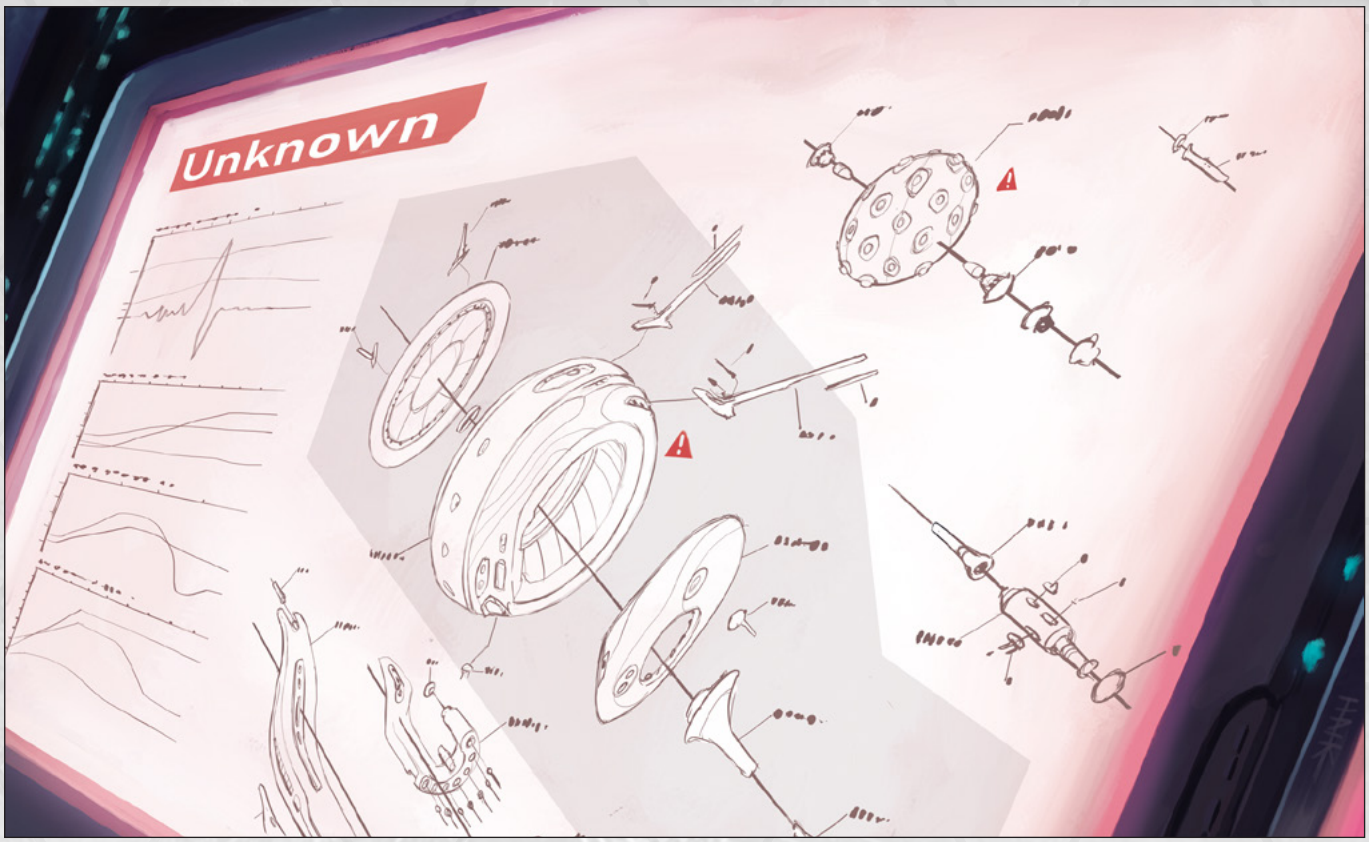
Ambassadors to non-Confederation worlds may be purely diplomats, especially when dealing with major powers such Imperial subsector capitals. Those assigned to independent or minor worlds often combine diplomacy with economic functions, acting as a merchant factor as well as political figure. A few orbital ports have cargo brokers of Sword Worlds origin who sometimes act as an ambassador when required.

On minor worlds, the Sword Worlds ambassador may be highly influential in local governance. This is quite deliberate and part of a general policy of expanding influence. Ambassadors are refreshingly open about this, often replying to accusations with phrases like: 'the day will come when you realise you wish to be part of the Confederation. My task is to bring you to this realisation as soon as possible.' Ambassadors generally give good advice to their hosts and can be called upon to act as an impartial (in local affairs at least) judge or legal advisor. Openness can build trust or undermine confidence in those who seem less honest about their intentions.

In addition to a penchant for plain speaking and fair treatment of their hosts, Sword Worlds ambassadors are known for putting on a good show. An event at the Sword Worlds embassy is always a whirl of uniforms and ballgowns with plumes, epaulettes and diamond-encrusted honours as far as the eye can see. Ambassadors are no more tolerant of over-familiarity or disrespect than any other Sword Worlders but they usually discourage such behaviour rather than challenging it directly.

The diplomatic corps also engages in spying, of course. A certain amount of information gathering is part and parcel of embassy operations and whilst Sword Worlds diplomats are notorious for having spy networks under their control they are also honourable about it when caught. The embassy will put up a legal fight and make the usual vaguely worded denials but if presented with proof the ambassador will take the attitude that 'the game was fairly played' and accept sanctions or dismissal of personnel providing the response seems fair.

These attitudes have won the Sword Worlds considerable sympathy in the surrounding area and are generally approved of by the Zhodani Consulate. The Sword Worlds will cheat, lie and steal like anyone else but they will behave honourably if caught. An 'honest liar' is more acceptable to the Zhodani psyche than someone who deceives through clever manipulation of the truth.



THE SCIENTIFIC CORPS

Most scientific research carried out in the Sword Worlds Confederation is done by universities or private corporations. There is, however, a central scientific corps tasked with unlocking the secrets of other powers' technology or undertaking research beneficial to the Confederation as a whole. The corps has a secondary remit for exploration, working with other agencies to send missions out to spinward and trailing. Their purpose seems to be exploration, although there are rumours that at least some missions are a cover for intelligence gathering or covert operations.

The scientific corps is much more formal and regimented than the academic research facilities of other powers. As a result it is perhaps less creative but certainly more methodical. The corps will patiently plod through every possible dead end, just in case one leads somewhere unexpected, and has made the occasional surprising discovery. High-end theoretical research takes second place to reverse-engineering concepts and technologies of more advanced states, with the result that the Confederation is gradually closing the technology gap at a fraction of the cost incurred by those pushing the boundaries of science elsewhere in Charted Space.

Primary areas of concern include the Darrian Star Trigger weapon. The Confederation does not want to use such a device but it needs to know how it operates in order to predict when, where and if it may be used, and how long it would take to create. At present the underlying concepts are only vaguely understood and scientists of the corps are increasingly convinced that the Star Trigger is not a viable weapon system. However, the consequences of being wrong could be catastrophic, so until the Star Trigger is conclusively proven to be unworkable it is treated as a clear and present threat.

Sword Worlds scientists tend to be physically adventurous; even quite senior academics are often seen in the field carrying out their own hands-on research. In recent years there has been an increase in the amount of attention given to historical and archaeological sites. It is not clear exactly what the corps is looking for but it has teams at many sites within and outside the Confederation. These are not, for the most part, suspected Ancients sites but include ruined cities, fossil beds and remains of civilisations that failed to get past the muscle power era.

The reasons given for these expeditions – historical interest and cultural studies – seem plausible enough but there are many who think the pragmatic Sword Worlds

would not be so interested if there were no practical applications. Others dismiss this as stereotyping, pointing out that the scientific corps has a habit of examining every tiny corner before moving on to another subject. Perhaps the expeditions are doing no more than garnering knowledge simply because it is available.

MERCANTILE SERVICE

The vast majority of commercial shipping within the Confederation is privately owned or operated by civilian corporations. However, many ships receive a small subsidy in return for being available as auxiliaries in the event of conflict. Others are actually owned by the Confederation Navy, a fact concealed by registration through a dummy company or registration as assets of a shipping line. Thus a shipping corporation that owns seven ships might actually be operating only five or six of them, with the others carrying an intelligence-gathering, military supply or armed merchant cruiser loadout.

In the event of conflict these vessels would normally transfer to overt naval operations, using navy transponder codes and identifying themselves as Confederation rather than civilian ships. Some would retain their 'innocent' identity and try to penetrate deep into enemy space as raiders or position a supply cache to support a strike force.

Even those ships genuinely engaged in commercial operations tend to be smart and efficient, almost military in their manner of operation. Sword Worlds merchant ships and liners are popular outside Confederation space due to their levels of service and the professionalism of their crews. A Swordie merchant ship will obey local traffic regulations and respond to instructions in a crisp and efficient manner that delights controllers used to having to deal with sloppy free trader pilots. Whilst crews like to blow off steam in portside bars like anyone else, they are aware that they are the public face of the Confederation and behave in a courteous manner – even whilst blind drunk. Stiff disciplinary penalties await those who cause trouble.

Much of the trade undertaken by these ships is entirely mundane but there is a grand tradition of long-distance entrepreneurial cruises undertaken by larger vessels. It is rare to see a Sword Worlds vessel trailingward of Lunion but occasionally one voyages as far as Trin or even Deneb. These ships are often away for years at a time, trading steadily to increase the worth of their cargo until finally the trip has made enough to justify the long reach homeward. A vessel that headed out with a hold full of mundane items might return to port two years later jammed full of high-value goods commanding a premium price in the markets of the Sword Worlds.

Voyages of this sort are often referred to as 'retirement cruises' since the crew will often make enough to retire early. Most do not, however, since taking part in a successful expedition usually results in promotion and new job opportunities aboard prestigious vessels. The master of a large merchant cruiser might have started their career with an entrepreneurial cruise among the border worlds in a small trading vessel but for every mercantile hero there are dozens of hopefuls struggling to make a living.

These voyages sometimes become legends among the spacer community. Many hear the tales of deals done in distant ports, complete with oddly precise information on tonnages and option prices, and conclude that the mercantile community is obsessed with money. This is not really the truth, however, to any Sword Worlder worth the name it is success and fame that really matter. Money made on a cruise is more important as an indicator of success than for its fiscal value. Money spends, as they say, but the trader's fame is undying.



C H A P T E R F O U R

NAVAL FORCES

The military and naval forces of the Sword Worlds Confederation are shaped by heritage as much as the foes they encounter. Darrian and Imperial vessels are almost certain to be vastly superior due to technological sophistication and there is absolutely nothing the Sword Worlds can do about that… at least not directly. It is, however, possible to obtain tactical advantages and exploit weaknesses in a strategic sense.

Sword Worlds strategy in a future war with the Imperium is based upon a contest of wills rather than weapons. The aim is to make war as costly as possible for the enemy and hope they are not willing to pay the price of victory. The key to this is to create a navy tough on the defensive and capable of hurting the economy and political will of an enemy. Thus the Sword Worlds Confederation Navy has three primary types of asset – defensive vessels, mobile reserves, that can also undertake local offensive operations, and raiders.

The Confederation Navy possesses a number of vessels in its own right, built with funds provided by members worlds but not owned by any of them. At need these vessels are supplemented by warships loaned by member worlds. The Confederation Navy thus contains a significant proportion of 'placeholder' units with a skeleton staff, waiting to receive additional forces at need.

The Sword Worlds Confederation uses a system of Fleets and Command Areas. Fleets are mobile combat assets, intended to operate en masse or provide detachments where needed, and would normally be expected to move between combat zones as necessary. Command Areas are local and static, and for the most part defensive in nature. Those close to a border may control offensive operations in enemy territory or raiders operating there and in the event that major territorial gains are made, additional Command Areas might be created.

The role of Fleets and Command Areas has been simplistically stated as 'Fleets seize enemy territory and destroy major intrusions into ours; Command Areas secure what we have'. This is partly true but, like everything else about the Sword Worlds, the reality is a little more complex.

FLEETS

In peacetime, the Fleets are administrative formations containing a command element and a few key vessels along with logistics ships and tankers. Each will have a handful of major combatants but derive fighting strength from forces contributed by member worlds as needed. Each Fleet is named for its primary base but might be sent far away during a protracted campaign. War plans are based on peacetime locations of the Fleets and likely threats they will face.

Given that warship strength comes mainly from contributed vessels, it is hardly surprising that organisation of the Fleets is flexible. Other than perhaps the command vessel itself, any ship can be reassigned to any other formation at any time. This may meet with opposition from the admiral losing their best warships but complaints are rarely heeded. Frequent reassignment causes serious administrative headaches and can be inefficient but when the Confederation's planners get it right their system makes the best use of the assets available.

Most of the Fleets are intended to operate en masse, counterattacking an incursion or driving into enemy space. Elements might be detached to other systems, of course, but on the whole Sword Worlds strategy is based around massed fleet action supported by peripheral operations. Division or dilution of force is a poor option against technologically superior opponents.

In peacetime these Fleets exist mainly as placeholders and training units, with vessels belonging to various worlds rotating through a Fleet to take part in joint exercises. In wartime, Fleets will be brought up to strength and used as necessary. It may be that the Sting Fleet ends up fighting in Darrian space, on the other side of the Confederation from its expected operating area, but this is factored into all Sword Worlds naval planning.

The general assumption among planning staff is that there can be no assumptions. Fleets and their dispositions are intended to be the basis for a flexible response. In theory, a Fleet might be drawn down to

nothing more than its command ship and a handful of escorts, patrolling a quiet sector whilst the balance of Sword Worlds naval power operates together elsewhere.

More likely, the 'outer' Fleets will defend their territory as best they can or launch offensives into enemy space, with the strategic reserve Fleets either bolstering a weak area or launching a powerful offensive. At its most basic, the plan is for the outer Fleets to either prevent defeat or lay the foundations of victory, with the reserve Fleets (the Gram and Sacnoth Fleets) then bringing that victory.

Tizon Fleet

The Tizon Fleet is named, like all the Fleets of the Confederation, for its primary base. It is the largest of the peacetime Confederation Fleets, tasked with offensive operations into the Entropic Worlds or the trailing-coreward end of Darrian space. In the event of a major war, the Tizon Fleet would most likely be ordered to drive into Darrian space, defending the Entropic Worlds and Tizon by defeating threats from that direction. If the Darrians were not involved in the conflict, and could be relied upon to stay out, the Tizon Fleet would likely transfer much of its fighting power to the Gram or Joyeuse Fleets.

Joyeuse Fleet

The Joyeuse Fleet is tasked with offensive operations to coreward, against Imperial targets in Vilis, and countering major fleet operations coming from that direction. Whether this would be in cooperation with the Gram Fleet or not, or if the Gram Fleet would transfer its assets to the Joyeuse Fleet, depends upon circumstances and the state of internal politics within the Confederation.

Gram Fleet

The Gram Fleet is one of two strategic reserve formations and is also tasked with defence of the 'Gram Arm' of the Sword Worlds subsector. It is currently the second largest of the fleets, although it would be expected to transfer vessels to the others at need. The Gram Fleet also contains a strike element capable of threatening Imperial naval bases at Lanth and D'Ganzio.

Sacnoth Fleet

The Sacnoth Fleet is the second strategic reserve formation. Similarly to the Gram Fleet, its primary function is to serve as a reserve pool of forces to be reassigned at need. The Sacnoth and Gram Fleets are capable of operating en masse, however. An invasion from Lunion would initially be met by local forces and the Sting Fleet, with the Sacnoth Fleet then moving up for a heavy counterattack.

Narsil Fleet

The Narsil Fleet is tasked with defending the Sacnoth Arm from Darrian incursion and presenting a clear threat to Darrian space around Mire. It contains a high proportion of strike vessels suitable for raiding or a destructive attack on infrastructure such as starports. In an all-out war the Narsil Fleet would probably see little action but would still tie down many Darrian vessels in case they did come out to fight.

Dyrnwyn Fleet

The Dyrnwyn Fleet varies considerably in size over time. Its purpose is to counterattack any Imperial assault on the region and pose a threat to Lanth. This threat is at times quite impressive; at others the Dyrnwyn Fleet is drawn down to reinforce other formations.

Sting Fleet

The Sting Fleet is tasked with the defence of the trailing end of the subsector, best accomplished by aggressive action into the Lunion Shield Worlds. An Imperial attack from Adabicci would be countered by mobile elements of the Sting Fleet.

Biter Fleet

The Biter Fleet normally has few heavy combat vessels. Its task is to harass and disrupt Imperial operations in Lunion and District 268 with raids, carried out by relatively light vessels. As such the Biter Fleet rarely operates as a unit, although it does have a core command element capable of fleet action.

COMMAND AREAS

Command Areas are static, with control centralised at a base. Command ships are used for detached forces but as a rule most vessels operate either close to their base or independently. Each Command Area has a mobile reserve of heavy defensive ships and a pool of lighter patrol vessels that operate in nearby systems. In addition, raiding vessels assigned to a nearby theatre of war are often placed under the administration of the local Command Area, although they will operate at discretion in wartime.

Area Commands control the heavy combat units deployed to defend a region as well as vessels assigned to general operations in the area. The term 'general operations' covers intelligence gathering, flag-showing, patrol work and preparation for raiding. The latter can involve prepositioning supply caches or fuel dumps in remote areas of a star system as well as more mundane charting operations. Most of this activity is carried

out by vessels posing as innocent commercial ships, although sometimes naval vessels undertake covert reconnaissance and preparation missions.

Command Area Hrunting
Command Area Hrunting is responsible for defensive operations in the Entropic Worlds and general operations in the Querion subsector. It also maintains links with the Zhodani base at Querion.

Command Area Mjolnir
Command Area Mjolnir is responsible for the defence of the coreward worlds against Imperial aggression and with general operations into Vilis.

Command Area Colada
Command Area Colada is responsible for defending the Gram Arm from Darrian incursions and securing any gains made in a conflict to spinward. A small raiding force is also maintained, which would disrupt Darrian operations in the first weeks of a conflict.

Command Area Durendal
Command Area Durendal has the largest area of responsibility of its kind. Initiatives to divide the command and set up a second control apparatus further rimward – perhaps at Biter or Sting – have been rejected on several occasions. Command Area Durendal controls a significant number of major warships but they are more dispersed than in other Command Areas. Its raiding force is also larger than others, with most ships based at Durendal but rotating through ready forward positions on a semi-regular basis. It is thought that some of these forward positions may be outside of Sword Worlds space.

Command Area Anduril
Command Area Anduril defends the Sacnoth Arm from Darrian incursions and would support raids into the heart of Darrian space if the need arose.

Command Area Enos
Enos would serve as a forward base in the event of major operations into the Five Sisters, District 238 and Glisten. At present it hosts a few minor warships undertaking commerce protection missions and patrols in the region. Historically, raids have been staged into Glisten from Enos, making it a target for Imperial forces. As a result, the Enos system is far better defended than the mainworld merits.

TACTICAL FORMATIONS
Most vessels deployed by the Confederation Navy are operated by their parent worlds in peacetime and grouped as the owning world sees fit. Most follow the general Confederation practice of forming task forces rather than neat squadrons of identical ships, usually with several supporting and escort vessels around a high-value unit or command vessel.

In Sword Worlds parlance, a ‘squadron’ is a formally organised unit with a command vessel of some sort, whilst a ‘force’ is a more temporary formation put together from available vessels. Squadrons are therefore larger but less homogenous than their Imperial equivalents. The designation of a squadron or force is based on its primary capability, which might be the role or type of a single ship within the squadron. For example, a formation built around the light cruiser *Ranzow,* consisting of a couple of destroyers and several small escorts, would be Cruiser Squadron *Ranzow* despite it only containing one cruiser.

A single ship is designated a ‘task unit’ if it has significant capabilities in its role but will often be referred to by name and class rather than a designation based on mission and role. A ‘task group’ is typically three to five vessels and a ‘task force’ generally contains three or more sub-units of varying size.

A fleet is built up of smaller units organised as squadrons and/or forces. This is a different usage of the term to the major organisational Fleets of the Confederation; the Gram Fleet, for example, is capable of detaching one or more smaller fleets to carry out a mission.

This organisational structure can be confusing to outsiders but that is considered beneficial by the Sword Worlds military. If a foreign power cannot be quite sure just how powerful a force is, or what vessels it contains, this creates a level of ambiguity that can be exploited by a smart commander. By way of example, a small fleet put together for a mission would be named for its commanding admiral or most powerful vessel, as would its sub-units.

This fleet is formed of formal and informal sub-units. The support and cruiser squadrons are standing formations with a designated command vessel and flag officer aboard, although command facilities aboard the ships are not extensive. The fleet command ship is a cruiser-sized vessel designated for the purpose and carries an admiral. This command element may have been together for some years, although the formations

Raiding Fleet Esben
(Admiral Esben Commanding)

- Command Squadron
  - Command Ship (Admiral Aboard)
  - Missile Cruiser
  - Escort Group
    - 5 Small Escorts
- Cruiser Squadron *Svenner*
  - 2 Heavy Cruiser (Commodore Aboard)
  - 1 Light Cruiser
- Destroyer Force *Koster*
  - 3 Destroyer
- Destroyer Force *Tera*
  - 2 Strike Destroyer
- Support Unit *Levea Metsa*
  - Missile Destroyer
- Fleet Escort Group *Esben*
  - 11 Small Escort
- Support Squadron *Lys Fremtid*
  - Destroyer (Commodore Aboard)
- 2 Tanker
  - Logistics Ship
  - 4 Small Escort

it led would vary over time. The command element is equipped to deliver standoff missile attacks or support its subordinate units and contains its own small escort group, which is taken from one command assignment to the next.

The two destroyer units are temporary, commanded by the senior officer aboard their vessels. An additional destroyer, primarily armed with missiles, is attached to the fleet as a single-ship unit. This might be for operational reasons, freeing the support unit to assist where needed, or because its performance is significantly lower than the other destroyers and would limit their effectiveness. The Fleet Escort Group is an administrative formation only; in practice its ships would be dispersed around the fleet as necessary.

The fighting capability of this fleet is at present five cruisers and seven destroyers, plus supporting forces. This is a significant force in Sword Worlds terms and worthy of the term 'fleet'. On another occasion Admiral Esben's force might be greatly increased in size, gaining more cruisers or even capital ships. Later, he might find himself commanding multiple destroyer formations or an assembly of escorts for a planetary assault force. This flexibility is one reason the Sword Worlds Confederation is so difficult to defeat; its naval forces reorganise and come back again and again, undeterred by the disintegration of fleet command structure.

WARSHIPS

The Sword Worlds Confederation is well aware that its naval forces cannot match those of the Imperium in a straight fight, either quantitatively or qualitatively. Ship design is therefore driven by three factors.

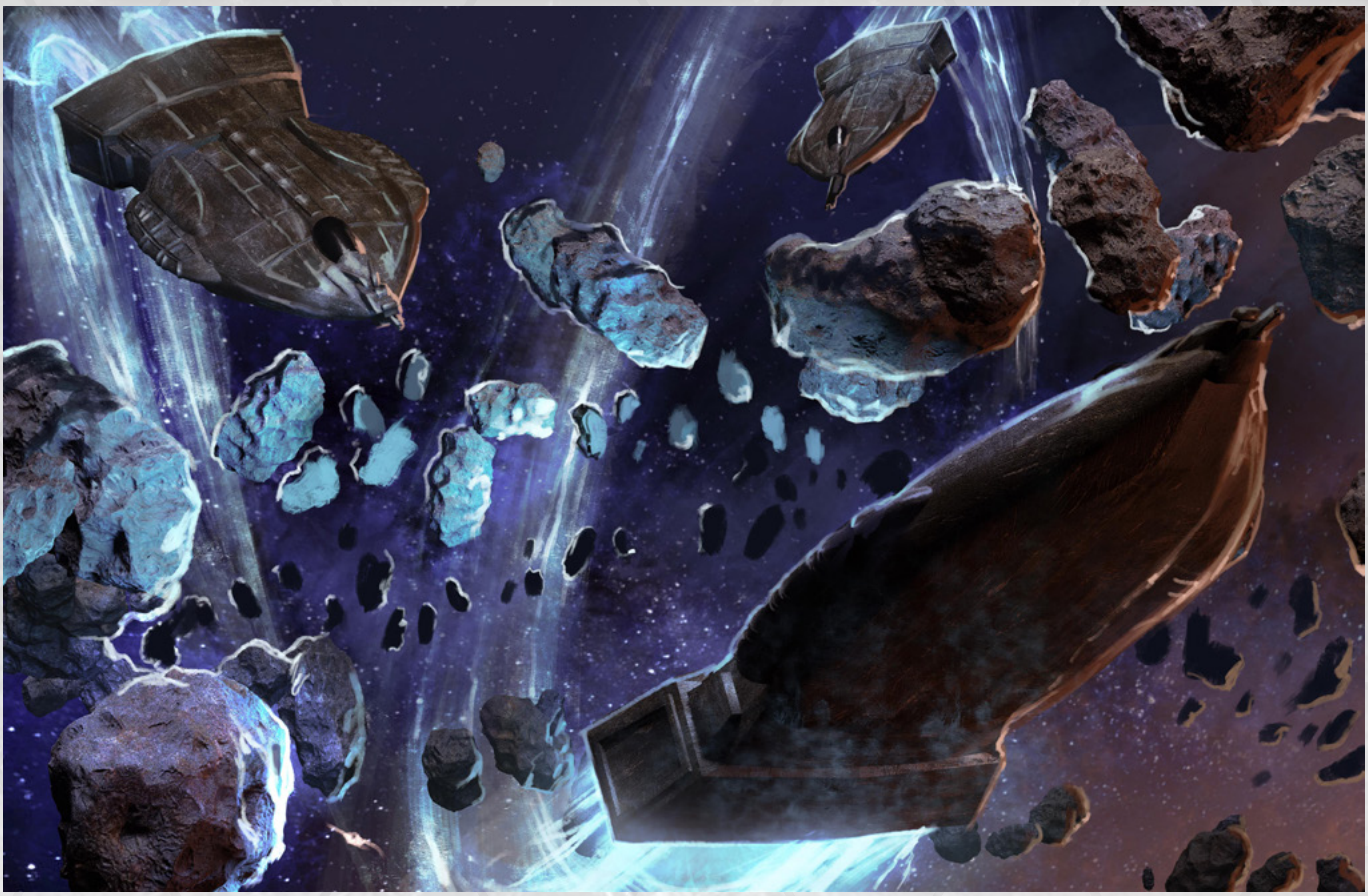
Intended Area of Operations: Ships intended to protect and defend the Confederation will generally operate on interior lines of communication and will rarely be far from a base. Vessels of this sort have low jump capability and relatively short endurance before requiring resupply. Those intended for external operations – which typically means raiding cruises or attacks on enemy bases – have longer legs and more supplies but must sacrifice fighting capability to achieve this.

Strike or Standoff: Most warships are lightly protected. They will either overwhelm opponents with heavy firepower, flee or be pounded into scrap. Vessels of this type are normally given the designation 'strike' and are capable of harming a more powerful ship at the expense of their own survival. This is the only viable option for a technologically inferior navy and makes a useful deterrent if an enemy is sure attacks will be pressed with determination. The Sword Worlds navy also makes extensive use of standoff weapons – missiles – to avoid going near the guns of enemy ships. Relatively few ships rely on beam weapons for their primary armament; missiles and torpedoes are favoured by most member worlds.

Interoperability: The nature of the Sword Worlds navy is such that vessels of many different types may be contributed, making interoperability an important factor. Most worlds use standard fittings and components even if they do not share designs. As a result, battle tenders can carry an array of craft provided by various worlds, organising them along lines of capability or type into temporary forces. Some worlds have chosen to create unique designs to demonstrate self-reliance but even so common strategic thinking tends to guide designers along paths trodden elsewhere.

SHIP TYPES

The most common naval assets of the Confederation are not military ships at all. A number of standard commercial vessel designs are subsidised to make them popular with merchant lines and external clients, so many of these ships are exactly what they seem –



rugged, dependable transports and utility craft. However, the capability for conversion to military use is built into these vessels, which form the basis of the Sword Worlds' logistics and support capability.

It is often not clear to an outsider which of these ships is a naval asset and in many cases operators have a duty to make their ships available at need. This creates a ready-made logistics and support network without drain on the naval budget, although it comes at the price of economic damage when the ships are recalled. The vessels are, in general, less resilient than Imperial equivalents and losses tend to be significant.

Among these civilian and potential-military vessels are many that conceal greater capabilities. Some are light battle tenders, carrying small craft to the combat zone or bolstering local defences. Others are deployed to undertake raiding cruises. The ability to pass as an innocent merchant in a common design can create a raider capable of longer cruises, more unexpected attacks and overall higher survivability than a traditional warship. A light cruiser or battlecruiser might be more glamorous but historically greater results have been achieved by ships relying on deception rather than speed and armour. The same characteristics make these armed merchant ships effective raider-support vessels.

True military craft start with small fighters and gunboats or torpedo-boats. These are designed to operate from a variety of platforms including orbital forts, armed merchant cruisers and naval carriers. A variety of small escorts in the corvette classes are also built, along with non-jump-capable system defence craft that can, in some cases, be carried by tenders to provide a heavy strike capability in other systems.

Most Sword Worlds destroyers are built either as patrol/escort designs or strike vessels, in which case armament tends to emphasise torpedoes and close-range, heavy-firepower weapons. Light cruisers tend also to be designed for this role, although some long-range raiding designs also exist. Heavy cruisers have a balanced armament, with greater emphasis on beam weapons than most Sword Worlds designs, although missile cruisers are also common. Most command ships are built on a heavy cruiser hull but with a wider range of capabilities, including a contingent of small craft.

Capital ships tend to fall into three types. Second class battleships are built for resilience but lack mobility; they are sometimes considered to be system defence craft with jump-1 capability to allow relocation or retreat. First class battleships have greater strategic mobility and are used as response forces or for offensive

operations. The most glamourous of the capital ship classes are the battlecruisers, however. The battlecruiser concept has been debated for centuries, with some navies creating what amounts to stripped-down battleships built for speed and high jump capability. In theory such vessels can outrun what they cannot outfight but in practice tend to take heavy damage in almost every engagement.

Sword Worlds battlecruisers tend to be more modest in terms of primary armament but trade this for survivability. Still lightly protected, a Sword Worlds battlecruiser is a formidable raider and can contribute heavy firepower to a cruiser or battle squadron. They are considered to be 'super cruisers' rather than capital ships but are lauded as the pride of the Fleets all the same.

Sword Worlds ships tend to be smaller than their Imperial equivalents and in general follow a 2-4-8 light-medium-heavy sizing increment within their general class.

Minor Combatants include gunboats, patrol vessels, escorts and corvettes and are generally in the 100–1,000 ton displacement class. A light gunboat might be 200 tons, while a heavy escort might come in at 800 tons. The use of standard sizings and fittings allows commonalty of components and docking equipment, which in turn allows contributed craft to be used aboard most Sword Worlds vessels. Not all member worlds follow these conventions, of course, but for the most part it is simpler, easier and cheaper to do so. Component availability and factory tooling tends to guide starship building policy as much as politics or strategy.

Small Combatants normally fall into one of three categories. Frigates tend to be built at 2,000 tons with escort and patrol roles in mind. A balanced missile/beam armament is common, with emphasis on defeating small craft and light combat vessels. Destroyers are normally 4,000-ton craft with higher manoeuvre performance and armament optimised for the strike role. Torpedoes and short-range, high-firepower beam weapons such as plasma barbettes are favoured, enabling aggressively handled Sword Worlds destroyers to damage more powerful warships – albeit at a high cost. 8,000-ton heavy destroyers are built by some worlds and there are also destroyer-leader and destroyer support classes in service. The latter have heavy missile armament for standoff engagements or attacks on ground targets.

Cruisers also fall into three categories. Light cruisers are typically 20,000 tons and biased towards a strike role, whereas heavy cruisers, at around 40,000 tons, favour a missile-heavy weapons fit. Some command cruisers are also built at 40,000 tons on the same hull as the heavy classes. The largest are the battlecruisers and considered by many to be capital ships in all but name. Typically displacing 80,000 tons, a battlecruiser may be set up as a command ship for a fleet or as an independent raider. The latter option uses more beam weapons as this reduces the logistics load.

Capital Ships are built in small numbers and do not generally follow the same size progression. Whether intended as heavy mobile defence assets or fleet battleships to carry the fight to the enemy, capital ships displace more than 100,000 tons and are individually prestigious. The loss of one would be a grave blow to the morale of the Confederation as a whole, although a gallant last stand would offset this somewhat.

Other Craft generally follow the same 2-4-8 progression. Fighters and small combat vessels are designated light, medium or heavy according to their role, as well as tonnage range, but as a rule designs are created according to whether they need a light, medium or heavy docking facility. Thus cargo shuttles are typically 80 tons or less, fighters 20 tons or less and most other craft in the 20–40 ton range. This leads to many personnel referring to a 20-ton-capacity docking clamp as a 'fighter clamp', a 40–ton capacity clamp as a 'utility clamp' and an 80–ton capacity unit as a 'shuttle clamp'. A variety of other craft including system defence vessels and non-jump-capable transports are also used. These generally parallel starship classes in size, making docking operations much simpler.

DEFENSIVE OPERATIONS

According to Sword Worlds naval doctrine, defence of the Confederation begins on the enemy admiral's desk. Deception and misinformation measures carried out in peacetime can impair an attack or lead to the enemy making serious mistakes. A policy of randomly changing identifiers of fleets and squadrons, along with moving vessels between formations, makes current intelligence scarce. Ships sometimes 'impersonate' one another or have multiple identities in order to confuse estimates of strength.

The thinking behind this approach is that an enemy lacking in reliable data might hesitate to commit his forces or may under- or over-estimate the strength arrayed against him. Once hostilities have broken out, efforts to deny information are stepped up. Deception operations are undertaken to confuse foreign analysts about where Sword Worlds fleets are, what vessels they

contain and what their intentions might be. Something as simple as moving a large number of tankers and supply ships towards the border may convince the enemy that an offensive is being prepared. Of course this only works if the opposition is aware of the movement but Sword Worlds commanders are adept at ensuring 'accidental' security breaches take place when necessary.

The next stage in defending Confederation space is to attack the enemy. This can take the form of raids on supply lines or bases, or a more general programme of commerce raiding. Formally known as Kreuzerkreig (cruiser warfare), this is undertaken by a wide range of vessels from battlecruisers to converted merchant ships. The damage caused to enemy shipping is significant but the intent is to force a response that pulls ships off the front lines or exposes targets to raids. It is often smaller patrol and escort vessels that are tasked with protecting commerce or searching for raiders. Small escort vessels can also be easily destroyed by more powerful raiders, causing losses to the enemy that can increase opposition to the war among its civilian population.

Threatened areas are reinforced by second class battleships and their support elements, creating a heavy defensive capability that can be pulled back when necessary. The main Fleets may also join a defensive action, although they are generally expected to defend by attacking the enemy's bases or nearby worlds in order to force a response, rather than chasing invaders. The last line is the system defence vessels operated by each world government, which are often augmented by ships assigned by the local Area Command.

A variety of gunboats and monitors are operated by members of the Confederation, along with forts constructed in orbit or built out of asteroids. Some of the latter are mobile, moving around their home system searching for intruders who may have deployed a base on a remote world. Most are positioned as artificial satellites over member worlds, acting as bases for gunboats and launching platforms for enormous numbers of missiles.

A very powerful invasion would be ground down by augmenting the defences of each threatened world in turn whilst launching attacks on its supply lines, with defeated in-system forces evacuated, if possible, or else left behind to conduct a campaign of harassment from hidden supply caches. Ground defences and army units would also be expected to make invasion and occupation as expensive and painful as possible for the enemy until such time as fleets could return. The Sword Worlds might not be able to repel an invader outright but they are quite capable of imposing a ruinous cost upon the victors.

OFFENSIVE OPERATIONS

Most offensive operations are aimed at destroying the enemy's will to fight or its means to do so. Fleet actions are aimed at eliminating an enemy installation or force, although this is not always done directly. Sword Worlds commanders prefer to nullify the superior mobility of an enemy by threatening something it must defend. This is one reason for the 'brute force' stereotype; sometimes a Sword Worlds fleet will advance en masse on an obvious target. This is often taken as a lack of imagination but such a gambit ensures the enemy will give battle in a predicable manner rather than jumping past the main fleet to attack targets of its own choosing.

The obvious battering ram approach also tends to draw in enemy reinforcements, which can be ambushed on their way to a rendezvous point. It is not uncommon for a massive Sword Worlds fleet to make such an advance as a feint, withdrawing without contacting the main body of the enemy. While the opposing commanders give press conferences about how they scared off the cowardly enemy, small elements of their force are being destroyed and raiders are operating freely. This tactic can fall foul of an admiral's ego if they feel personal honour requires battle but most Sword Worlds commanders are sufficiently professional – and wily enough – to realise that damaging the enemy for no loss is a valuable outcome.

It is widely recognised that gaining territory is something that happens at the negotiating table rather than in battle. Landing troops to take possession of a world or installation is part and parcel of making war but often more can be gained by grabbing territory then negotiating a withdrawal in return for concessions or gains elsewhere than by attempting to take and hold every scrap of land. Sword Worlds forces will often strike targets they could not possibly expect to retain in the long run, for use as bargaining chips or to gain access to technology. It is common for a captured installation to be rapidly stripped by field engineers and components shipped back to the Sword Worlds before everything immobile is smashed. An agreement not to trash the place is sometimes incorporated into a negotiated withdrawal – again, in return for other concessions.

Naval attacks are often accompanied by groundside raiding parties, even if the intention is to wreck an installation rather than capture it. When conquest is

the aim, a spearhead force is usually deployed from naval assault ships but the bulk of troops come from the ground forces. In general Sword Worlders prefer not to use orbital bombardment or weapons of mass destruction, accepting greater casualties among their personnel if necessary. This is, in part, a tradition developed during internal conflict – today's enemy is tomorrow's ally or citizen – and partly a memory of the destruction wrought in the clashes that ultimately resulted in the Fimbulvetr.

RAIDING OPERATIONS

The principle of raiding as part of warfare and politics is deeply ingrained within the Sword Worlds psyche. This is partly cultural, resulting from a fascination with the Scandinavians of Old Earth's ancient history, but mostly pragmatic. Raiding has always been the tool of the weaker power and the Confederation sees no shame in admitting it is grossly outmatched in a straight fight against the Imperium.

Some raids are directly military in nature, such as attacks on enemy supply bases and repair yards. Others are politico-economic, intended to cause damage to the enemy's infrastructure and commerce – and thereby to influence ship deployments and foster a more defensive mindset. Raids can be purely space-based or might involve landing a force to secure, strip and thoroughly wreck a target before withdrawing.

Raiding operations are conducted honourably wherever possible. An enemy who surrenders will be given the chance to move personnel to safe areas or evacuate a vessel – simply allowing crews to get into life pods is not enough to satisfy honour if the target is in a system where rescue is unlikely. Whenever possible personnel will be taken off a vessel or leave it with minimal power for life support but otherwise rendered useless as a starfaring asset. This is not always possible, however, and civilian crews are considered acceptable targets in wartime. Those who abuse the chance to surrender are rarely granted mercy.

Although care is taken to avoid unnecessary casualties, those necessary are inflicted without remorse. A merchant ship will be blasted apart by a hail of missiles, without warning, if the raider needs to strike fast and escape a rapid response. Raider crews consider raiding an inevitable consequence of strategy, so victims have been failed by those who chose not to protect them from what was certain to happen.

This is more than hair-splitting justification, it is an ingrained part of Sword Worlds culture. A society that fails to provide adequate protection to its citizens is worthless and those who choose to accept this take their chances. This also colours Sword Worlds attitudes to natural disasters and accidents – an earthquake cannot be prevented but a society that does not rush to the assistance of the victims has failed to live up to its social contract. They honourably contributed to society and should expect assistance when required.

NAVAL RANKS

Member worlds of the Confederation are free to create their own rank structures and many use systems that vary slightly. All are comparable to the Confederation Navy rank structure. Enlisted personnel use a system similar to that of many other polities, rising through the ranks from spacehand to master chief petty officer. There are a few unique specialist titles but for the most part the structure is similar to other navies.

Rank titles and their meanings are derived from German traditions on Old Earth. Although some linguistic changes have occurred the Confederation Navy has retained the German pronunciation of its ranks to distinguish its personnel from the army, which uses a more Scandinavian tradition.

Enlisted ranks follow a similar progression to most other navies, albeit with different titles. Some navies use a system whereby all combat pilots are officers but the Confederation does not. Flight duties are generally accompanied by rapid promotion to the petty officer ranks (maat and above) but most combat pilots are not commissioned officers. The rationale is that officers must have good leadership skills and it would be a shame to wash out an excellent fighter jock just because they failed academic or leadership requirements for the post.

Likewise, some posts aboard a warship that would require an officer in other navies can be assumed by an oberbootsmann (chief petty officer) or higher ranked enlisted man. Rather than placing a junior (and therefore probably inexperienced) officer in charge of a major bay weapon, the Confederation would rather the team be led by an experienced oberbootsmann. Pilots, gunnery chiefs and senior engineers are often petty officers aboard small warships, although vessels of cruiser size and above always have officers in sensitive posts.

The Confederation Navy is a very lean organisation, with relatively few officers compared to other navies. Most technical functions fall upon petty officers, along with

Enlisted Ranks

Rank	Imperial Equivalent	Notes
Martrose	Apprentice	A crewmember who has not yet completed training or passed final examination.
Obermatrose	Spacehand	A qualified crewmember. The majority of personnel hold this rank or that of Gefreiter.
Gefreiter	Able Spacehand	An experienced crewmember without leadership responsibilities.
Maat	Petty Officer 3rd Class	A junior petty officer will normally be responsible for a small team, such as the operators of a weapon cluster, or the solo operator of an important system like a sensor system on a small warship. Maat is the minimum rank for sensitive tasks such as boat pilots.
Obermaat	Petty Officer 2nd Class	Responsibilities of an Obermaat are typically similar to those of a Maat, with higher rank indicating experience.
Bootsmann	Petty Officer 1st Class	A Bootsman will typically lead a large team, including other petty officers, or oversee several teams rather than being part of one. On larger ships some Maat and Obermaat jobs will be taken by a Bootsmann.
Oberbootsmann	Chief Petty Officer	Oberbootsmann and higher-ranking petty officers handle most of the day-to-day running of a warship – and indeed of the navy.
Hauptbootsmann	Senior Chief Petty Officer	A Hauptbootsmann will often be the most senior petty officer aboard a warship, acting as representative for the crew to the captain (and outside agencies) and taking responsibility for discipline.
Stabsbootsmann	Master Chief Petty Officer	A Stabsbootsmann may be the senior enlisted man aboard a ship or part of the staff of an important project. They may be given command of a small starship.

many leadership roles. The divide between officers and enlisted personnel is quite large as a result. Officers are required for roles that require education in subjects beyond the practical training of a spacer and all officers are expected to be able to make strategic decisions.

It is thus entirely acceptable for a fighter wing to be commanded by a stabsbootsmann who has proven a good tactician and excellent pilot, leading pilots by example, but the 'big picture' is the preserve of officers. The stabsbootsmann will report to an officer who may have half their experience but has proven they are capable of grasping strategic implications.

A junior officer might find themselves serving aboard a small starship commanded by a stabsbootsmann, although this is avoided wherever possible. The chain of command is clear here – a ship's master is its master, no matter what rank subordinates hold. A wise officer will take the opportunity to learn from such an experienced spacer and a wise stabsbootsmann will phrase orders in tones of proper respect.

Ships commanded by enlisted personnel normally handle routine tasks that do not require 'big picture' decision making. Supply vessels, escorts and the like can be entrusted to enlisted personnel but a vessel sent off on a two-month discretionary patrol will be commanded by an officer.

Officer Ranks

Rank	Imperial Equivalent	Notes
Faehnrich im Raum	Officer Cadet	After a period of initial training, officer cadets serve aboard various navy ships. It is common to find larger ships with many junior officer slots filled by cadets.
Leutnant im Raum	Ensign	The most junior fully commissioned rank, a Leutnant im Raum is expected to fulfil their role at least as well as specialist enlisted crew and be able to lead a team effectively. It is widely recognised that new officers will learn from enlisted personnel.
Oberleutnent	Sublieutenant	Oberleutnants sometimes command a division of a small ship's company or more commonly fulfil specialist roles that require an education such as astrogator, chief engineer or ship's doctor.
Kapitensleutnent	Lieutenant	A Kapitensleutnent may command a division of a ship's company or fulfil specialist functions aboard larger vessels.
Korvettenkapiten	Lieutenant-Commander	The lowest rank suitable to command a starship, most Korvettenkapitens lead a division of a larger ship's crew or fulfil important functions aboard a major ship, such as gunnery officer aboard a cruiser.
Fregattenkapiten	Commander	A fregattenkapiten may command a warship of up to destroyer size or head a division aboard a larger ship. They might instead fulfil an important function aboard a capital ship, such as astrogating officer for the vessel and attached escorts.
Kapiten im Raum	Captain	Kapiten im Raum is the minimum rank to command a major or capital ship.

Flag Officer Ranks

Rank	Notes
Komodore	Over 95% of flag officers hold the rank of Komodore. Most command bases or sub-units of a fleet. An important task might be carried out by a single powerful ship commanded by its own Kapiten but carrying a Komodore in overall command of the mission.
Kontreadmiral	A Kontreadmiral (rear-admiral) will normally command a squadron or task force operating independently or equivalent force forming part of a fleet but likely to be detached at some point.
Vizeadmiral	A Vizeadmiral (vice-admiral) will normally command a small fleet or powerful component of a larger one, such as a battleship squadron.
Admiral	A full Admiral will normally be assigned to a Command Area of a Fleet.
Generaladmiral	The rank of Generaladmiral is held by the commander-in-chief of a member world's naval forces. It is not part of the navy hierarchy as such but, depending on the world in question, might be considered equivalent a flag rank according to the weight of metal under the admiral's hand.
Grossadmiral	Grossadmiral (grand admiral) is the most senior rank in the Sword Worlds Confederation Navy, commanding the entire naval force of the Confederation.



Officers of flag rank make up a slightly higher percentage of all officers in the Confederation Navy than elsewhere. This is because administrative, liaison and training requirements are overseen by officers holding the rank of komodore, as well as many missions involving only a handful of ships.

Just as officers are expected to be vastly more knowledgeable than enlisted personnel, flag officers are put through advanced training and given additional education in subjects as diverse as astrophysics and politics. Those who excel serve as komodores for a time progress into the admiral ranks. Those who are merely good at their job are never promoted again. A komodore is expected to be a good tactician, logistician and strategist capable of getting results on a shoestring when necessary, or excelling in a supporting role such as running a naval base or training installation. Most serve out the latter years of their career as base commanders or leaders of a fleet's sub-units.

Only the very best of an already small officer class progress to admiral. There is no direct Imperial equivalent of the Sword Worlds admiralty; the system is different as a result of cultural and strategic influences.

Admirals are associated with Fleets and Command Areas but may be detached to carry out important tasks. Where a komodore might be sent with a task force to carry out a mission at need, naval policy is that any major force – usually defined as a cruiser squadron or heavier units – operating independently should be commanded by an admiral. Fleet components likely to be detached are thus given to admirals to command; those likely to remain within control range of a command ship or base are led by komodores.

The generaladmirals of the member worlds are not in the normal Confederation chain of command but might be assigned Confederation Navy ships to assist their own forces in defence. In that case, the generaladmiral is in overall command of the system defence and can give orders to any Confederation officer assigned to that force. Thus there are circumstances where a generaladmiral can give orders to a full Confederation Admiral who has been placed under their command, making generaladmiral the senior rank in that specific circumstance. In terms of honours and respect, generaladmirals are usually accorded the same courtesy as a full Admiral.

CHAPTER FIVE

GROUND FORCES

Like the navy, the ground forces of the Sword Worlds contain a small number of Confederation units and a much larger contingent of contributed forces. Ground forces use a three-tier system, with high-end formations using grav transport and regular forces equipped with wheeled vehicles, for the most part. The third tier is made up of irregular and ad-hoc formations generally referred to as 'volunteer units'. Equipment at this level varies considerably.

Overall, emphasis is on mobility and firepower for most formations, with a few exceptions such as assault forces and units intended to face them. In war with a technologically superior opponent, it is likely that formations will be quickly located and broken up or subjected to heavy attack. It is not possible to remain combat effective against such an opponent by soaking up damage but a formation that can disperse into smaller components and keep fighting can remain at least marginally capable of causing harm to the enemy.

A 'hit, scatter, regroup' philosophy pervades most design and doctrine within the Sword Worlds military. Artillery formations are designed to deliver maximum firepower in as short a time as possible; grav cavalry forces emphasise the capability of a single tank to survive counterattack and continue causing mayhem. Some Imperial observers have misconstrued this as a brute-force approach to warfare but it is almost entirely the opposite. A force might well be smashed in the first minutes of an engagement but will have already caused a lot of damage. As larger formations are pounded, they break into sub-units that continue to fight with aggression and intelligence.

A common analogy is of a man armed with a battle-axe who deals a mortal blow to his enemy, only to find his opponent is made up of many smaller men who do not know how to quit the fight. Heavy strokes fell some of the smaller men but from each of their corpses a swarm of bees arises. The axeman will be stung again and again until he slays the very last of the bees, by which time he may not consider victory to have been worth the effort. Of course, not every opponent is so powerful; many are overwhelmed by firepower and aggression early in the battle. An enemy expecting to retain neat organisational structure may be overthrown when the action breaks down into a collection of pell-mell scrambles they were not prepared for. Sword Worlds forces, on the other hand, expect this from the outset.

This doctrine runs throughout the Sword Worlds military, influencing equipment design, training and tactics. Sword Worlds military personnel are warriors as well as soldiers, trained to make intelligent decisions and carry out bold actions even when communications are down and there is nothing resembling order to the fight. Indeed, it is in this sort of chaotic scramble that the Sword Worlds excel. The system relies on individual courage and initiative, and often results in heavy losses where a retreat to regroup might have been more appropriate. However, Sword Worlds military history abounds with heroic last stands, incredible rampages by lone tanks and death-rides by naval ships that left enemies dismayed and disheartened. Fed on a steady diet of such tales, the average Sword Worlds warrior knows what is expected and will, far more often than not, do it with gusto and pride.

As a result of this philosophy, combat formations use a 'battlegroup' organisational structure. Formal units such as regiments, battalions and divisions exist but protocols are always in place for command to devolve downward on whatever assets survive. Officers at all levels are trained to scrape together whatever forces they have available and this is routinely done even when heavy losses have not been taken. Thus a neatly organised lift infantry brigade might arrive in the theatre of war but very quickly its elements will be mixed with whatever other forces are available in a bewildering array of task-oriented battlegroups. The system is flexible and resilient but also a logistical nightmare.

The majority of ground force personnel are trained and equipped as light infantry, with 'light' in this case referring to a lack of transport. Light infantry units are paired up with transport assets to create mechanised, motorised or lift infantry formations. Some units are raised as dedicated grav cavalry or lift infantry but most are put together on a temporary basis from light infantry and transport or support units as needed.

GRAV-MOBILE FORCES

The first-tier units of the Sword Worlds Confederation armies are fully equipped with grav transportation and generally used for mobile warfare rather than local defensive operations. A unit's designation is determined by its primary troop type and role but actual composition can vary.

Grav Armoured formations are uncommon. Consisting of a heavy grav tank force supported by grav-mobile infantry and artillery, grav armoured formations form the spearhead of a planetary attack or counterattack and are designed to go head-to-head with equivalent forces. This is a viable tactic when fighting other Sword Worlds forces but the rather basic grav tanks available to the Confederation cannot survive direct combat against those of the Imperium.

Grav Cavalry forces are far more common than armoured units. Cavalry in this context refers to an integrated force of infantry riding armoured fire-support/transport vehicles – the equivalent of Infantry Fighting Vehicles on mid-tech worlds – with light grav armour and artillery in support. Cavalry formations are not put together from light infantry and transport; they are permanently embodied and trained to fight as an integrated team.

Grav Recon forces are light armoured formations with a small infantry contingent, fully integrated in the same manner as cavalry units. In addition to conducting reconnaissance, grav recon units are the Confederation's primary fast-strike forces, either attacking targets before withdrawing or acting as a spearhead for lift infantry. Grav recon forces are also used for counterattacks and harassment of enemy formations.

Grav Assault forces are rare. They include a grav recon/grav cavalry element but are accompanied by aerospace fighters and gunships for the orbital assault role. Assault formations are not normally broken up but used en masse as a sledgehammer to take a critical objective in the shortest possible time. These forces are optimised for headlong assault operations and far less effective in sustained combat or when trying to hold what has been taken, so are followed by lift infantry or defensively oriented forces if the target is to be held.

Grav Support units are not committed to battle solo or in peacetime configurations. Support units include artillery, aerospace defence, logistics, transportation and electronic warfare formations, which are assigned to battlegroups as necessary.

Lift Infantry units are created as needed by combining light infantry with grav transports and adding support elements such as fire support and artillery vehicles. Lift infantry formations, with a varying level of support, form the primary combat strength of the Confederation's armies.

NON-GRAV MOBILE UNITS

The majority of formations are not fully grav mobile, although they may include grav vehicles. Wheeled ground vehicles are favoured; only very heavy vehicles use tracks and these are uncommon. The majority of units parallel their grav-mobile counterparts, such as mechanised infantry using wheeled rather than grav transport, or cavalry formations using fast wheeled transport and fire support vehicles. Artillery units tend to use rocket systems for a rapid shoot-and-scoot capability, although tube artillery is in use along with direct fire support weaponry on a lightly armoured chassis. Some do not follow the same pattern as grav-mobile forces, however.

Urban Combat units are formed primarily of infantry but contain significant numbers of light grav vehicles. These include lightly armoured air/rafts and grav gunships, enabling the force to operate in three dimensions among tall buildings. Units tasked with the defence of a city are usually supplemented with heavy weapons and in aerospace defence assets, whilst those intended to capture one rely on dedicated support formations to provide these functions.

Anti-Armour units are usually compound formations, equipped primarily with wheeled vehicles mounting missile launchers plus a contingent of grav tank destroyers. These are simpler, cheaper vehicles than the standard grav tank, generally mounting a powerful weapon in a limited-traverse mount rather than a turret. Sniping from ambush, they are highly effective whilst grav mobility – in theory – prevents the force from being outflanked. A grav vehicle can spin on its vertical axis much faster than a tracked vehicle can traverse, making tank destroyers of this sort viable for defensive operations. They are rather limited in the attack, however.

Aerospace Defence units sometimes include heavy tracked vehicles to carry powerful weapons but for the most part use wheeled transport. Some weapons are mounted on vehicles; others are carried as components by several. These take some time to assemble once the unit reaches its new location, making these units

vulnerable to counterstrike. Heavy aerospace defence assets are always protected by a security element with the capability to engage light aerospace targets as well as defending against ground attack.

Fortress formations are designed for defence of key points and often contain a mix of infantry, fire support and aerospace defence units. Most cities have hardened defence nexus points and many have permanent aerospace defences in place. A fortress unit might man these or could be assigned to an otherwise undefended city to turn it into a hard target.

Security formations are lightly equipped, usually with a mix of wheeled transport, armoured cars and militarised air/rafts. They are capable of conducting straight military operations but more commonly employed in a counter-insurgency or heavy security role. A security formation might be deployed to deal with heavily armed criminal gangs alongside the Patrol but would more commonly be seen guarding an installation threatened by pirate raids or similar paramilitary threats.

Intelligence Assault formations are lightly equipped for combat but often have grav vehicles for high mobility. They may also include light grav-capable engineering vehicles and electronic/cyber warfare assets. The function of these formations is to follow closely behind regular troops and seize everything that might interest the intelligence or scientific community back at base. An intelligence assault formation will contain low-level analysts but its primary function is to grab what it can and get it back to base as fast as possible.

Naval Infantry formations are commanded by the navy and staffed by its personnel but train alongside regular army units much of the time and can serve as light infantry as well as any other force. In addition, naval infantry are trained for shipboard combat and assaults upon orbital installations. Protocols exist for a naval infantry force to 'borrow' army assets and the converse sometimes occurs when circumstances merit it. Naval infantry are akin to the marines deployed by other powers but are more specialised and lack the lavish support of the Imperial Marine Corps.

THIRD-TIER FORMATIONS

The third tier of the Confederation ground forces is often referred to as the Volunteer Forces, as many of the units have traditionally been raised from local militias or similar organisations. Equipment varies as might be expected.

Mercenaries are sometimes deployed as part of the Confederation armies. In this context, a mercenary force is one with no connection to any Sword Worlds homeworld or government, which typically means a unit originating outside the Confederation or containing a majority of personnel who are not Sword Worlders. Care is taken to select mercenary units compatible with Sword Worlds military ethics but even so these formations are not viewed as positively as Freikorps originating within the Confederation.

Freikorps may or may not be mercenaries; the term refers to any independent military formation raised within the Confederation or containing a sufficient proportion of Sword Worlder personnel that it is 'Sword Worlds' in character. Freikorps have been raised by wealthy individuals wanting to contribute to a war effort or as a viable business, serving as mercenaries when not in the employ of a world government. Freikorps are generally better regarded than non-Swordie mercenaries but their quality can vary considerably. Most are primarily infantry forces with a few support weapons and vehicles, although there are some very well equipped Freikorps units with grav armour and artillery.

Jaeger units have a special place in Sword Worlds military mythology. Jaegers in this context are volunteer marksmen. The difference between a Jaeger unit and a militia is slight but important; any band of citizens can take up arms to defend their homes but only those who have proven themselves effective and honourable can call themselves Jaegers. Some local defence associations traditionally use the term Jaeger; this carries a weighty responsibility to live up to the standards of those who earned the honorific. Jaeger associations are proud of their status and train in marksmanship. In wartime, tradition requires every member of a Jaeger unit immediately offers themselves for voluntary service without asking for pay. In practice, those taken into service are valued as scouts and marksmen and given a temporary pay grade at least equivalent to a qualified infantry soldier.

Militias exist, under different names, in urban and rural areas. Almost any community could throw together a militia of some sort led by whoever has combat experience or trust of the local populace. Some are more organised and may have access to heavy weapons supplied by the state or local notables. Few militias qualify as Jaegers but most are capable of putting up a stubborn defensive fight. Occasionally a militia unit will be co-opted into a regular army unit, although it will generally serve intact rather than being assigned to battle groups since its members lack the training to be effective in this role.

Penal Units are generally used for labour such as fortification repairs, although personnel will be armed for self-defence. Occasionally a penal unit will be assigned to – or may volunteer for – extremely hazardous duty. Success is almost always rewarded with a reduction in sentence. Small penal units may be formed in a war zone on an ad-hoc basis, with personnel serving a period for offences that are forgiven after a suitable target has been met. This might be a certain number of unexploded warheads located, days in an exposed front-line observation post or some similar requirement. Larger penal units are permanent formations whose members know they are expendable but only at need. Not all offenders are deemed suitable for a chance at redemption in this manner and as a result – generally speaking at least – the bargain remains intact even when there is no-one to enforce it. For example, a penal unit may be ordered to hold out as a rearguard whilst other formations are evacuated, on the understanding that the army will make a credible effort to get as many of the penal unit's personnel out as possible. Even if this effort failed, the majority of the unit would fight on as promised, surrendering no more readily than a regular army force. Such is the weight of a promise or bargain in the Sword Worlds psyche.

GROUND FORCE FORMATIONS

The Confederation prefers to field larger formations, which consist of units originating from a single world, in order to minimise training and doctrinal differences. As a result, large-scale formations tend to consist of more sub-units than might be found in a more unified military system. Formations use standard definitions roughly equivalent to those found elsewhere but with local variations. Notably, the battlegroup system results in non-standard forces in terms of both size and composition. However, peacetime organisation is generally neat and formal in order to simplify training and support.

Pluton (Platoon)

The smallest tactical formation used by the Sword Worlds military is the pluton, generally equivalent to a platoon in the Imperial military. A pluton usually consists of three sub-units plus a command element, such as three grav reconnaissance vehicles and a (probably identical) vehicle carrying the pluton commander. Sub-units are normally a single vehicle or a sektion (section) of around eight infantry soldiers. A pluton is normally led by a loejtnant (lieutenant). In infantry formations it will usually have a strength of around 30–32 personnel.

An **infantry pluton** can operate as a small self-contained combat force with a few support weapons and designated marksman who is not a fully trained sniper but has impressive skills all the same. Sektions are the primary manoeuvre and fire units in the face of the enemy, with personnel carrying sufficient grenades and disposable anti-armour weapons to deal with most threats.

A **grav cavalry pluton** consists of four vehicles, all variants on the same armoured transport. The command vehicle usually has extra communications and aerospace defence weapons and the three cavalry vehicles mount support weapons capable of engaging light armoured vehicles. Personnel are cavalry troopers rather than infantrymen and normally fight in conjunction with their vehicles. Each vehicle and its crew is an integral part of the sektion, unlike lift infantry where vehicles and infantry are considered separate units working together. Cavalry squads contain less ground combat personnel but have greater firepower than lift infantry.

Foretag (Company)

The foretag is the standard building block of almost all formally organised units. A foretag is normally composed of three plutons plus a headquarters/support pluton. In a formal unit these would be of the same type but often a foretag-sized battlegroup is thrown together out of whatever forces are available. A unit of slightly greater than foretag size or with significant additional support weapons, is usually termed a reinforced foretag until it grows large enough to be considered a battalion-sized unit.

A **light infantry foretag** contains a small number of light, man-portable anti-armour and anti-air weapons, usually reusable launchers for missiles shared among the rest of the unit. The pioneer sektion is equipped similarly to infantry but trained to clear obstacles or quickly build field fortifications. The unit overall is commanded by a kaptajn (captain) assisted by a premierloejtnant (first lieutenant), with pluton loejtnants leading their own units and taking over command at need in order of seniority.

A light infantry formation of this sort can be converted into a lift infantry force by amalgamating it with a foretag-sized transport unit. Each pluton of infantry is assigned a pluton of transport and works with it whenever possible although units are sometimes swapped around. The transport foretag's headquarters and commanding officer are amalgamated with those of the infantry, with the infantry kaptajn in command and the transport kaptajn taking responsibility for logistics and support functions.

Light Infantry Pluton

- Command Sektion
  - Command Squad (Loejtnant Commanding)
    - Pluton Commander
    - Pluton Sergent
    - Pluton Marksman
    - Medic
  - Rifle Squad (Korporal)
    - Squad Leader
    - Support Weapon Gunner
    - 0–2 Infantrymen
- 3 Infantry Sektions
  - Support Squad
    - Sektion Leader (Serjent)
    - Support Gunner
    - 2 Infantryme
  - Rifle Squad
    - Squad Leader (Korporal)
    - 3 Infantrymen

Grav Cavalry Pluton

- Command Vehicle (Loejtnant commanding)
  - Pluton Commander
  - Pluton Serjent
  - Medic
  - Driver
  - Gunner
  - 1–3 Cavalry Troopers
- 3 Cavalry Fighting Vehicles
  - Vehicle Commander (Serjent or Korporal)
  - Driver
  - Gunner
  - Support Gunner
  - 3–5 Cavalry Troopers

Foretaginfanrteri/Light Infantry Company

- HQ/Support Pluton (Kaptajn Commanding)
  - Command Sektion
  - Anti-Armour Weapons Sektion
  - Aerospace Defence Weapons Sektion
  - Pioneer Sektion
- 3 Light Infantry Plutons (Loejtnant)
  - Command Sektion
  - 3 Infantry Sektions

Reinforced Company-Sized Lift Infantry Battlegroup

- Command Pluton
  - Grav APC Command Vehicle (Premierloejtnant Commanding)
  - Lift Infantry Sektion
    - Light Infantry Sektion
    - Grav APC
- Grav Recon Pluton (Loejtnant)
  - Grav Cavalry Command Vehicle
  - 2 Grav Recon Vehicles
- Artillery Pluton (Seniorserjent)
  - Recon Air/Raft

- Grav APC (Artillery Rocket Vehicle)
- Lift Infantry Pluton (Loejtnant)
  - Lift Infantry Command Sektion
  - 3 Lift Infantry Sektions
- Lift Infantry Pluton (Loejtnant)
  - Lift Infantry Command Sektion
  - 2 Lift Infantry Sektions
- Provisional Lift Infantry Pluton (Naval Infantry Premierloejtnant)
  - Lift Infantry Command Sektion
  - 3 Naval Infantry Sektions
- Support Pluton (Chefserjent)
  - 2 Grav Transport Vehicles
  - Aerospace Defence Grav Vehicle
  - Infantry Security Detachment

Security Battaljon

- Headquarters & Support Foretag (Oberloejtnant Commanding)
  - HQ Pluton
  - Light Aerospace Defence Pluton
  - Light Anti-Armour Pluton
  - Engineering Pluton
- 3 Security Foretags
  - HQ/Support Pluton
  - 2 Security Plutons
  - Mobile Pluton



Command normally devolves one level down the 'teeth' unit (in this case the infantry component) before moving to the most senior 'tail' officer. So, if the kaptajn of the infantry unit was downed, his second in command (a premierloejtnant) would take over rather than the transport kaptajn, who would lead in preference to the most senior pluton loejtnant of the infantry. His second-in-command would then take over, with command of whatever was left of the unit then devolving on the infantry pluton loejtnants in order of seniority.

This unit would be identified to a higher commander as a '**battlegroup, reinforced lift infantry company**', which indicates roughly what its capabilities are. They could look up the latest information if needed but the 'big picture' requires only that the commander knows this force can fight about as well as a lift infantry company, is fully grav mobile and its primary fighting strength is infantry.

The unit is formed from the remnants of a lift infantry company, commanded by its former second in command who holds the rank of premierloejtnant. Most remaining lift infantry personnel from the original unit have been amalgamated into two plutons, one of which is sufficiently understrength that its personnel have been grouped into two sektions instead of the usual three. An orphaned naval infantry pluton, with its commanding premierloejtnant acting as the overall force second in command, has been added to bring infantry strength back up and given a few personnel from the lift infantry as well as vehicles.

A single aerospace defence and lone artillery vehicle, along with a couple of logistics transports, have also been co-opted but what makes this a reinforced company rather than a company-sized battlegroup is the addition of a grav cavalry command vehicle and two grav recon platforms, greatly adding to the unit's firepower. Although rather rag-tag in appearance this battlegroup is capable of carrying out offensive operations and has sufficient combined arms capability to deal with most threats. When the battlegroup commander checks in with superiors they will be asked if they are combat-capable (the answer is almost always yes) and assigned a slot in a larger battlegroup or given orders to undertake independent operations. Even if this was the only force for many kilometres it is quite capable of making a severe nuisance of itself.

Battaljon (Battalion)

The battaljon is the smallest administrative unit maintained by the Confederation,and normally commanded by an oberstloejtnant (lieutenant-colonel). Organisation follows the usual three-and-one ratio of primary units and support. This makes Sword Worlds battaljons smaller than battalions deployed by many other powers, with three companies of the primary unit type and a headquarters/support company. The latter contains an administrative detachment that is normally left at the unit's base to handle long-term issues such as pay, retirement and direction of recruits and replacements. This staff also ensures that even if the fighting companies were completely wiped out the battalion would survive.

Battaljons usually deploy as a complete unit, forming part of a brigade or larger formation. However, they rarely stay that way for long. Every battaljon headquarters company is capable of becoming the headquarters of a battaljon-sized battlegroup containing many different unit types; battaljon commanders are trained to have at least an appreciation of what

other kinds of troops need to keep them in action and how best they can be used. A battaljon headquarters company can, in theory at least, be put in place as the command unit of any sized force, although it would normally receive additional assets if assigned as the headquarters of a brigade or higher formation.

A **security battaljon** would normally deploy to hold down a captured city or major installation. It is equipped to deal with insurgencies, mass looting and minor counterattacks but would require support from mainstream combat forces to deal with a major assault. Most vehicles are light wheeled designs, armoured against small arms fire but nothing heavier, and mounting light support weapons only. The mobile pluton of each security foretag is equipped with militarised air/rafts or similar light grav vehicles and can patrol among high buildings or place forces on upper levels quickly.

The engineering pluton may find itself building roadblocks and improvising bunkers or repairing power and water conduits depending on the deployment. Its vehicles are not capable of heavy or large-scale earthmoving but can carry out a variety of engineering tasks, many connected with the restoration of normalcy rather than defence. The anti-armour and aerospace defence plutons would normally be equipped with infantry-crewed weapons capable only of dealing with lightly protected threats at short range but sometimes a security battaljon is turned into a defensive battlegroup by the addition of heavier assets.

Security battaljons are often used as strategic placeholders during a campaign. The commander might find themselves in charge of a reinforced brigade-sized battlegroup, either because the city being secured is under threat or to permit orphaned units to rest, reorganise and be assigned to new formations. Thus the staff of a security battaljon headquarters are constantly planning how to deploy additional forces if necessary and how to provide logistical support for depleted, tired and combat-weary units rotated into the area.

Brigad (Brigade)

The brigad is the smallest strategically significant formation deployed by the Confederation. It would normally be commanded by a brigadegeneral and contain three battaljons of its primary combat unit type plus a support battaljon. At the beginning of a campaign a brigad might be neatly organised but even in peacetime many are formed from available forces rather than conforming to a theoretical perfect composition.

At these higher levels of organisation, details of subordinate units become less important, and a commander who insists on knowing whether the aerospace defence pluton of one battaljon has two or three operational missile launcher vehicles will find themselves swamped in details at the expense of the big picture. Instead, the brigad commander needs to know their forces are combat-capable and that subordinates will inform of perceived weaknesses. If not, they can assume they have a brigad-equivalent fighting force and direct it accordingly.

This brigad can field three **mechanised infantry battaljons**, each formed from a light infantry battaljon and transport battaljon operating lightly armoured wheeled vehicles equipped with support weapons. These units may be detached and replaced over time but the headquarters and support battalion will usually remain together. Brigad support battaljons are composite units made up of foretags, each part of a specialist battaljon in peacetime. Some artillery and aerospace defence battaljons deploy as a unit; most are broken up to create composite units.

This force might receive additional units to create a reinforced brigad. These would likely be mechanised, using ground transportation but might be grav units if available. Cavalry or reconnaissance units would increase striking power; an artillery battaljon would be useful in attack and defence. It is possible that a brigad might be given control of a mess of remnants until they can be brought back up to strength or assigned to suitable battlegroups. Likewise, the brigad might lose one or more of its infantry battaljons, possible gaining a replacement unit.

Division

The Sagamaal word for a military formation composed of multiple brigads is the same as in Anglic. A division normally comprises either two or three brigads plus some supporting elements and since composition can vary considerably, divisions follow the battlegroup principle. However, the general type of a division is important – an armoured division represents rather more fighting power than an infantry division, for example. Transportation is also highly significant; a grav-mobile unit within a mechanised division is limited by speed of ground units, although it does represent a useful mobile force at the local level.

Divisions are built around a divisional headquarters formation commanded by a generalmajor (major-general) and containing battaljon-sized support units. The brigads attached might be neatly organised and operating in peacetime composition or could be collections of battlegroups approximating a brigad in fighting power. The prevalent troop type or role of

Mechanised Infantry Brigad

- Brigad Headquarters (Brigadegeneral commanding)
  - Headquarters Detachment
- Aerospace Defence Pluton
  - Security Pluton
- 3 Mechanised infantry Battaljons
  - Light Infantry Battaljon
  - Mechanised Transport battaljon
- Support Battaljon
  - HQ/Brigade Logistics Foretag
- Mechanised Artillery Foretag
  - Aerospace Defence Foretag
  - Workshop Foretag

the unit, usually dictates its title unless this gives a misleading impression of the unit's capabilities. For example, a force containing mostly lift infantry but with a mechanised (wheeled) artillery component would be referred to as a mechanised infantry division rather than lift infantry.

Fortress divisions are typically built out of whatever forces are available. These are often depleted or weary units or formations that do not really fit elsewhere. A critical objective might be assigned a custom-constructed division formed from the best troops available and organised along formal lines but most commanders must make do with what they are assigned. This division-size formation was created by sending a stream of units to reinforce a local security force comprising the city's static aerospace defences, a security battalion and a contingent of local militia.

The division contains three 'fighting' brigads, each of different character. The infantry brigad was a formally organised mechanised infantry formation, whose transport assets were subsequently stripped and reassigned. The brigad can currently field one wheeled-mobile battaljon and two others with partial mobility. The remainder of the force is deployed in key areas or held in reserve to be moved by available transport assets in relays.

The security brigad is built around the city's original security battaljon and has been augmented with a second security battaljon, a very capable urban combat unit and a small collection of artillery, aerospace defence and support vehicles. The mix of forces averages out as equivalent to an infantry brigad in defensive urban combat.

Fortress Division

- Divisional Headquarters (Generalmajor Commanding)
  - Headquarters Battaljon
    - HQ Foretag
    - Aerospace Defence Foretag
    - HQ Security Foretag
    - Divisional Intelligence Foretag
  - Infantry Brigad
    - Brigad Headquarters (Brigadegeneral commanding)
    - Mechanised infantry Battaljon
    - 2 Light Infantry Battaljons
    - Brigad Support Battaljon
  - Security Brigad
    - Brigad Headquarters (Oberstloejtnant commanding)
    - 2 Security Battaljons
- Urban Combat Battaljon
- Brigad Support Group
  - Provisional Fortress Brigad
- Brigad Headquarters (Oberstloejtnant commanding)
- Local Aerospace Defences
- Grav Anti-Armour Battaljon
- Penal Battaljon
- Mechanised Engineering Battaljon
- Provisional Fortress Battaljon
  - Jaeger Foretag
- 2 Militia Foretags
- Provisional Support Group
- Brigad Support Group
  - Support Brigad
    - Brigad Headquarters (Brigadegeneral commanding)
    - Heavy Aerospace Defence Battaljon
    - Aerospace Defence Battaljon
    - Artillery Battaljon
    - Workshop Battaljon
  - Attached Local Forces
    - Various Militia

The provisional fortress brigad is made up of whatever oddments were available, plus the city's existing aerospace defence assets. These are housed in bunkers around the city and its immediate area. A penal battaljon and an engineering unit have been brought in to build additional fortifications and the divisional commander has been lucky enough to obtain a depleted grav tank destroyer battaljon. Although seriously understrength, this unit will be a potent asset among the tall buildings of the city. A provisional infantry battaljon has been formed from the best militia formations and a jaeger association equivalent to an understrength foretag. This brigad, like the security force, is augmented with a scratch support group containing a few heavy weapons.

The divisional support brigad consists of formally-organised battaljons with various capabilities. The presence of a heavy aerospace defence unit, along with the city's own assets, will make direct assault very costly, although the divisional artillery is sufficient to counter a bombardment or break up an assault. Overall, the divisional commander has a good mix of forces and can counter most threats. Strategy is based upon stubborn defence at ground level and in taller buildings, gradually withdrawing into the heart of the city. The commander knows the division cannot hold out indefinitely against an enemy well supplied with tanks or heavy artillery but can impose a heavy cost to take the city and perhaps hang on long enough for mobile forces to break the siege.

Kar (Corps)

A kar is formed of two or more divisions and supporting forces or from an equivalent number of brigades and battlegroups not formed into formal divisions. A kar is normally commanded by a generalloejtnant (lieutenant-general) and has no fixed composition. A small kar would contain around 20 to 25 battaljon-equivalents, usually grouped into brigads and divisions on at least provisional lines, with typical strength nearer 40 to 50 battaljon-equivalents. A mix of forces is desirable, ensuring that a kar can put combined arms battlegroups into action at many points within its area of operations and in sufficient strength to overcome their opponents.

Slagfaltet (Battle Front/Army)

A slagfaltet, or 'battle front', is composed of two or more kar plus supporting forces, under the command of a general. Other militaries would use the word 'army' for this size of force, in the context of *an* army rather than *the* army of the Confederation. A slagfaltet would contain at least a 100 battaljon-equivalent units – probably far more – organised and commanded at the kar, division and brigad level. A major world or the Confederation as a whole, can field multiple slagfaltet in the same or different theatres of war.

MARITIME AND AEROSPACE FORCES

Maritime and aerospace forces are considered to be part of the Confederation's 'ground' forces, using the same rank and organisational structure as troops intended for ground operations. Orbital defence pilots are normally considered to be part of a world's navy – in some cases they represent the entire offworld capability – but craft intended to operate in atmosphere the majority of the time are usually controlled by ground forces.

Maritime forces typically consist of lightly armed patrol craft and infantry units trained and equipped to operate in coastal waters. Few governments need to worry about the possibility of major maritime conflict, although some maintain powerful surface or submarine craft. Even then, these are more likely to be mobile bases for ground troops with a secondary maritime combat capability, than warships intended for direct action.

Maritime forces use the same names as land units, although composition is naturally different. For example, a patrol boat battaljon might consist of three foretags of lightly armed coastal vessels plus a support formation dedicated to maintaining the vessels. Some units contain a mix of infantry and craft to transport them and might have lightly armoured vehicles or grav craft for patrol work.

Aerospace forces are similarly organised. An aerospace brigad might contain two atmospheric/close orbit interceptor battaljons plus a maintenance, security and base protection element; a grav gunship battaljon might operate independently or be incorporated into a kar or division as a support element. Once gravitic technology is available, there is no longer such a sharp divide between land/sea/air assets. Instead, forces operate in three-dimensional battlespace in which terrain is only one factor. Thus it is not uncommon to find a mix of ground or maritime units in a formation alongside grav craft or aerospace assets. The command and organisational structure of Sword Worlds forces is entirely capable of accommodating all types of unit within the same formation.

RANK IN THE CONFEDERATION MILITARY

Like the navy, the Confederation army has a sharp divide between enlisted and commissioned personnel and has a low officer-to-enlisted ratio. Most tasks can be accomplished by enlisted men led by one of their own. Officers are expected to grasp the bigger picture

Enlisted Ranks

RANK	IMPERIAL EQUIVALENT	NOTES
Rekrut	Recruit	Soldiers who have not completed training hold the rank of Rekrut. Under some circumstances a deployed formation may be composed of Rekruts, qualifying as Menig upon seeing action or after so many days in-theatre.
Menig	Private	The rank of Menig (ordinary soldier) is broader than in many militaries. There is no equivalent of private first class or lance-corporal; most soldiers serve honourably for many years without progressing to higher rank.
Korporal	Corporeal	Korporals provide leadership at squad and sektion level, as well as fulfilling many technical functions that require greater education. Many vehicle commanders hold the rank of Korporal.
Sergent	Junior Sergeant	Sergents are found in junior leadership positions such as assisting a pluton commander or carry out administrative and technical functions.
Seniorsergent	Senior Sergent	A Seniorsergent is typically the senior non-commissioned officer in a foretag or an equivalently responsible position.
Chefsergent	Sergeant-Major	Chefsergent is the most senior NCO rank in a battaljon. Many NCOs of this rank are assigned to the staff of senior officers.

and have a broader education than enlisted leaders but just as in the navy they are expected to be as good as a specialist enlisted man at their primary function. Rank names are ultimately derived from the Danish and Swedish titles of the original colonists.

To be a menig (soldier) of the Confederation is a proud thing. Pay is increased for satisfactory service; a 10-year menig makes a lot more than a new recruit. Thus promotion is not eagerly sought out by most enlisted personnel and few would be disappointed if they were never promoted in their entire career. A Confederation enlisted man does not derive his self-worth from an increasingly inflated title, nor seek leadership positions they do not want for the sake of ego or illusion of success. They know they are valued for their service and courage, so do not need steady promotion through an excessive number of grades to prove it. Unless an individual feels called to lead others, it is honour enough to serve.

Gaining a commission in the Sword Worlds army requires a good education and ability to see beyond the immediate situation. Officers are expected to be good tacticians but also grasp the political and logistical implications of their actions. NCOs commissioned in the field are normally given the provisional rank of loejtnant-kadet or occasionally kaptajn-kadet. This 'candidate' status is removed once the new officer demonstrates education and strategic thinking. This means that after any major conflict the universities see an influx of soldiers on secondment, gaining the academic or technical credits to make their new status permanent. Those who simply cannot make the grade return to being enlisted personnel, although with a special honour title to indicate that they have – at least for a time – served at a level that exceeded all that could be expected of them. Some choose to revert to this status even after qualifying as officers; this choice is always honoured.

Progression to the general officer ranks is methodical. A loejtnant learns their trade leading a small force then moves up to a staff position as a premierloejtant. There, they gain an understanding of how larger forces operate before commanding one as a kaptajn. Next they serve in an assist-and-facilitate role as major, learning how battaljon-sized forces work before commanding one as an oberstloejtnant. The rank of oberst is a stepping stone to the general officer ranks and will usually see the officer carrying out a number of specialist roles as well as being a handy go-over-there-and-take-charge asset.

Officer Ranks

RANK	IMPERIAL EQUIVALENT	NOTES
Forebild	None. The nearest title would be 'Paragon'	An enlisted man who has been commissioned in the field and done an officer's job but is unable to meet the retroactive qualification requirement, or who chooses to return to the ranks, is honoured with the title Forebild. These men are considered almost-officers and highly respected but have no formal leadership responsibility. Instead, they raise the overall standard of the army by example and would be followed without question by any Sword Worlds soldier.
Kadet	Officer Candidate	A Kadet has not yet finished their training or been given a commission. The term is used with an officer rank (such as Kaptajn-Kadet) for those commissioned in the field but not had their new rank formalised. Used solo, it indicates an officer in training who will graduate as a Loejtnant.
Loejtnant	Second Lieutenant	The vast majority of officers in the Sword Worlds military are Loejtnants. Typical level of responsibility is leadership of a pluton or an equivalent position on the staff of a senior officer.
Premierloejtnant	First Lieutenant	Senior lieutenants are typically second in command of a foretag or members of a senior officer's staff.
Kaptajn	Captain	A Kaptajn typically commands a foretag or equivalent force.
Major	Major	Major is largely a staff rank in the Sword Worlds military, although some foretags have a Major in command, typically elite or specialist units. Most Majors support commanders of battaljons or larger formations in roles such as battaljon intelligence or logistics officer, or as second-in-command.
Oberstloejtnant	Lieutenant-Colonel	An Oberstloejtnant is required to command a battaljon or battaljon-sized force, at least on a permanent basis. In wartime, expedience may place a lower ranked officer in charge but the training received before taking up a battaljon command position is important to the running and tactical use of the force.
Oberst	Colonel	Oberst is a staff rank to a great extent. Some battaljons have a full Oberst in command but most progress to staff positions in higher formations after commanding one as an Oberstloejtnant. An Oberst will head a project or sometimes a small detached force or will support an officer of General rank.

General Officrt Ranks

RANK	IMPERIAL EQUIVALENT	NOTES
Brigadegeneral	Brigadier-General	A brigadegeneral commands a brigad-sized force or equivalent.
Generalmajor	Major-General	Generalmajor rank is required to command a divisional-sized force, although at times leadership may devolve to a lower ranked subordinate.
Generalloejtnant	Lieutenant-General	A Generalloejtnant commands a kar consisting of multiple divisions.
General	General	A full General commands a slagfaltet, assisted by a large staff and junior general officers capable of taking command of a detachment.
Marshal	None	The commander-in-chief of an entire world's armed forces holds the rank of Marshal, as do a small number of Confederation officers qualified to coordinate the actions of multiple very large forces.
Grossmarshal	None	The 'Grand Marshals' each command the ground forces of an entire region of the Confederation, with one of their number in overall command of the entire military.

C H A P T E R S I X

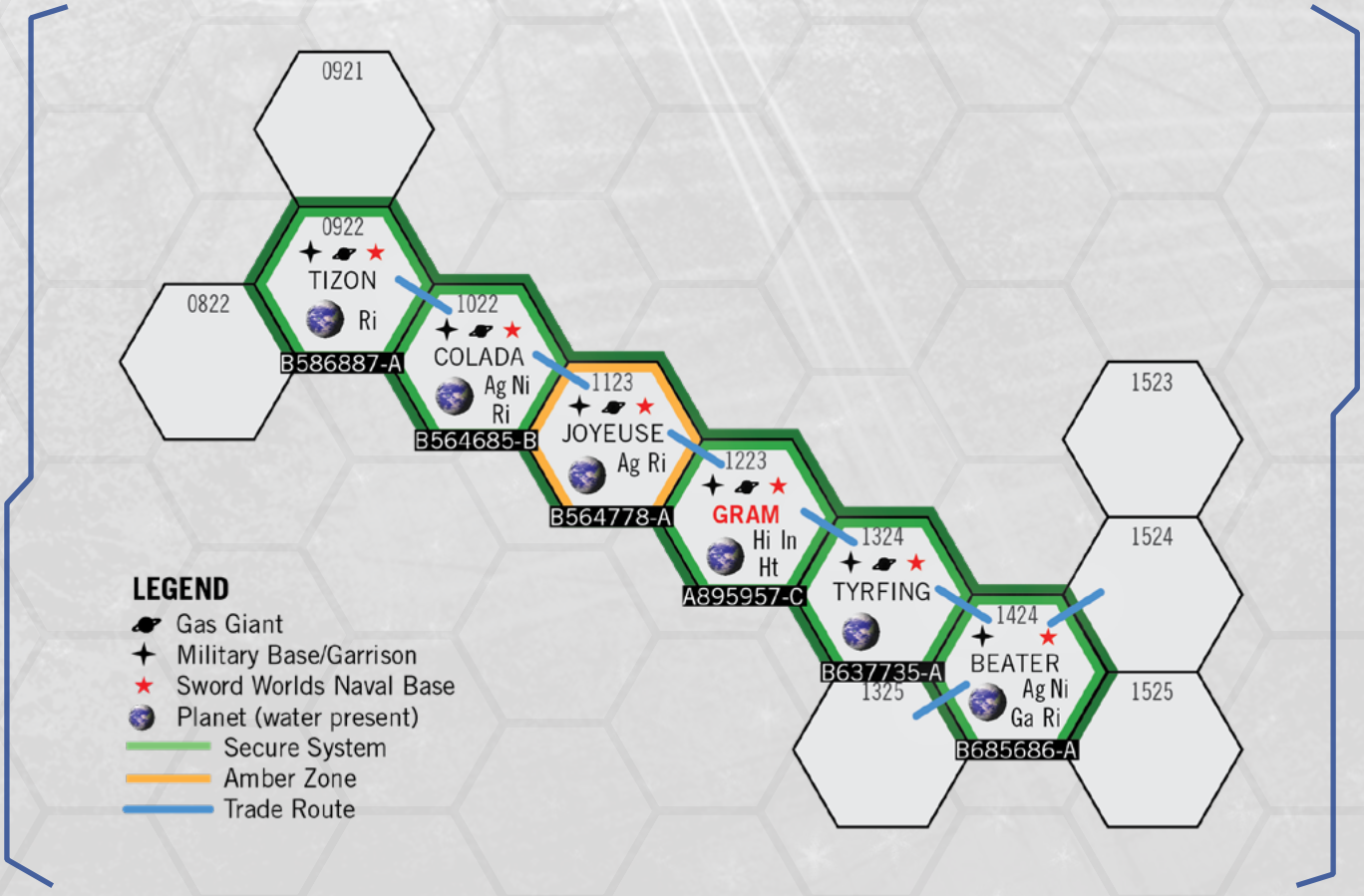
THE SWORD WORLDS AND ASSOCIATED STAR SYSTEMS

The region popularly referred to as 'the Sword Worlds' contains several systems that have always been part of what is now the Sword Worlds Confederation, plus a number of associated systems that have been Sword Worlds territory at times or are of strategic interest. These systems are grouped into regions by astrography and political considerations, although opinions are divided as to exactly which worlds belong in any given grouping.

THE GRAM ARM

The Gram Arm contains the earliest worlds settled by what would become the Sword Worlds. Expansion outward from Gram was driven by astrographical convenience to some extent but the nature of the early Sword Worlds was such that colonisation was undertaken on a methodically and centrally controlled basis rather than a free-for-all. For the most part, the plan worked as intended, with small colonies set up on worlds linking Gram to the best prospects, which then received much greater investment to bring them to a productive state.

Similarly, expansion within star systems was pursued wherever it offered significant advantages. The difficulty of supporting a colony on a rockball world was offset in many cases by mineral wealth and the advantages of being able to conduct in-system commerce without tying down precious starships. Careful reconnaissance and planning allowed a rapid early expansion that established some of the Sword Worlds as powers for the future but it was these emerging powers that ultimately derailed the development of the Sword Worlds as an interstellar power when they began asserting independence and pursuing their own agendas.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Tizon	0922	Naval, military	B586887-A	Ri	—	G
Colada	1022	Naval, military	B564685-B	Ag, Ni, Ri	—	G
Joyeuse	1123	Naval, military	B564778-A	Ag, Ri	Amber	G
Gram	1223	Naval, military	A895957-C	Hi, In, Ht	—	G
Tyrfing	1324	Naval, military	B637735-A	—	—	G
Beater	1424	Naval, military	B685686-A	Ag, Ni, Ga, Ri	—	—

TIZON

Tizon is named for Tizona, one of the two swords of the knight Rodrigo Diaz de Vivar, better known as El Cid. El Cid was renowned for his loyalty and skill in battle – it is said he never lost a fight. Tizona's power was dependent upon the wielder's own; in the hands of a great knight, Tizona could terrify and overthrow any opponent.

Tizon orbits a K2 (orange) subgiant star named El Cid, which has a distant M3 (red) main sequence star as a companion. Subgiant stars are in the process of expanding into giants, which will result in the destruction of all planets in the inner system. Tizon is doomed in a few million years but will remain habitable for the likely span of human habitation. Indeed, Tizon might actually become more welcoming over the next hundreds of thousands of years.

Today, Tizon has a dense atmosphere and 60% surface water coverage and is habitable without artificial assistance. This was not always the case, however. In the years before their civilisation was sent back to the stone age by the Maghiz event, the Darrians terraformed what was then an uninviting rockball planet. Water was obtained by processing gases from the nearby gas giant's atmosphere and, with help from microscopic organisms brought in for the purpose, Tizon gradually became suitable for settlement.

Some species native to Darrian and extinct there due to the Maghiz, are still present on Tizon, which is gradually warming up as its star slowly expands. The time frame is vastly greater than all of human existence, so the climate will not change in the next few centuries. Tizon receives enormously greater solar radiation than it did before El Cid began expanding into a giant star and would be too hot to be useful were it not for the dense atmosphere and thick cloud cover. This results from evaporation of the oceans and blocks a great deal of sunlight; breaks in the clouds are rare and rainfall is near-constant.

The overall climate at ground level is rather cold as a result of the cloud barrier, so most of the 400 million or so inhabitants dwell in the more temperate equatorial strip. Further north and south the constant rainfall becomes sleet or hail, with many areas completely snowbound. There is virtually no food production outside the equatorial strip, requiring constant shipments to support the few mining centres based in remote locations.

Storms are common in the warm blanket of clouds and can be very violent. Often a break in the clouds follows a storm, resulting in rapid warming in the local area and a new round of atmospheric turbulence. This can result in torrents (even by Tizonian standards) of warm rain that make breathing an exercise in trying not to drown.

The cloud barrier is maintained by a self-sustaining cycle. Most solar heat is absorbed or reflected by the cloud layer, creating turbulence insufficient to break up the thick layer. Heat is trapped at this level and does not reach the surface most of the time. This reduced oceanic evaporation, thinning clouds and allowing the lower altitude temperature to rise, which in turn replenishes the clouds by increasing evaporation. There is a distinct thermocline, or inversion layer, between the cold low altitude air and warmer cloud zone. This can have strange effects on communications signals and occasionally throws unwary spacecraft around. Those used to Tizon's atmosphere cross 'the layer' with care.

Society

Tizon has always been a major player in the affairs of the Confederation. From 281 it was the capital of an empire which lasted almost 300 years. Although Tizon possessed a solid industrial base, its power was built upon commerce for the most part. Internal trade was vigorous, promoting efficiency to wring the most out of any deal and this attitude was carried to other worlds by trade fleets. As a result, Tizon has always been able to do more with what it has and get what it needs at a very favourable price.

This commerce-oriented mindset still pervades Tizonian society today. Some of the world's greatest heroes are captains of famous entrepreneurial starships whose legendary voyages inspire new generations of traders to go the extra parsec on their cruises. Endeavour in any field is considered worthy on Tizon but those who enrich society are particularly honoured. This colours

perceptions of the military to some extent. Warriors fight to protect society and may add new territories but wars cause destruction and cost a lot of money. On the other hand, a successful trader benefits everyone by bringing wealth into the economy and improving relations with other societies.

This does not mean the military are not well respected but Tizonians have a different attitude to conflict than many other Confederation members. Cost effectiveness and long term gain are more important than glorious deeds and Tizon is prone to negotiate throughout a conflict rather than at its end. Agreements to leave some targets off-limits to combat forces are common, as are regular offers on peace at a suitable price. It has been uncharitably said that if Tizon cannot defeat a foe outright they will drag out the conflict to bankrupt them or force an opponent to the negotiating table where they can be fleeced by Tizon merchants masquerading as diplomats. Unkind as this impression is, there is much truth in it.

In addition to its many business opportunities, Tizon is a centre for learning. Its universities house some of the greatest thinkers in Confederation society and many great works of art have been produced. Debating societies and salons where the talented and learned (or merely rich and opinionated) can discuss obscure matters are common in the cities. The business schools produce some of the most effective planners and traders in the Confederation. It is common for a young man to attend one in order to secure his future, then return to a university to study what interests him once he has made his fortune.

The very rich patronise art and learning, with the result that Tizon draws talented people from offworld who could not otherwise afford to pursue their talents. This is seen by Tizonians as a good trade; the patron gains status and respect for furthering the career of a great talent and allowing their works to flourish, whilst the talent gets to do what they love.

Much has changed since the days of the Tizonian Empire but the former cult of the Emperor still has many adherents. Like Aesirism, the cult has far more 'cultural followers' than actual believers but there are a few who genuinely believe their rulers were demigods and that the 'fifteenth emperor' awaits his time. This legend has much in common with the stories of King Arthur from Old Earth, portraying a time of great crisis in which the divine emperor will lead Tizon (and the rest of the Sword Worlds) to victory and into a new golden age. In recent years this segment of the religion has become more of an apocalypse cult, preaching that dark times are imminent and the fifteenth emperor will soon arise.

The government, likewise, has changed since the days of empire. It is today run like a business, with cost effectiveness and efficiency as primary aims. There are many checks and balances involved in governance, largely to prevent power from being consolidated in the hands of a few individuals. Other than the adherents of the emperor cult, nobody on Tizon wants to return to empire; they would much rather enjoy social mobility through commercial success and exert influence through the economies of other worlds rather than shedding blood to gain dominance.

Tizon Starport

Tizon follows a common practice in the Sword Worlds; its downport and associated industries are located a modest distance from the capital. It is common elsewhere to find capital and main port co-located, having grown together at the site of the first or main colonial landings, but the Sword Worlds have tended to keep the two separated. There is really no need for the capital to be the home of industries that need direct access to space and, of course, keeping foreigners away from the capital is often desirable.

The downport is located on the northern coast of the southern continent, Noegin, whilst the capital (Ny Atal) lies across the Athskillen Sea. Both have large seaports and non-urgent goods often move by sea aboard vessels designed to take standard spacegoing freight containers. Other cities are located on or close to the shores of the equatorial zone, making sea transport a cost effective solution to most requirements.

The downport is connected to the highport by a regular and efficient shuttle service. Few vessels proceed directly to the surface even if capable. This is partly for economic reasons – almost all commerce is handled in orbit – and partly to avoid flying through Tizon's thermocline. The orbital port is one of a series that have been constructed over the years as trade expanded and technology advanced. Earlier installations, or at least parts of them, have been rebuilt into six smaller orbital ports. Each of these serves either a particular type of vessel or ships belonging to certain corporations, with shuttles connecting them to the main highport.

Tizon's highport thus sits at the centre of a web of orbital transit corridors. Most traffic directly into the port is in the form of small (sub-4,000 tons) vessels, with bulk freighters using one of the two large-ship docks and trans-shipping cargo as necessary. This requires a large apparatus for efficient operations but such a system has been in place for generations. It is not uncommon for cargoes to be bought and sold on local auction sites several times before being unloaded. Most bulk cargoes

go on to their destination direct from the large docks without passing through the main port but ownership changes all take place at the highport.

Not surprisingly, Tizon Highport has an extensive commercial sector and in addition caters to large numbers of passengers. It is a tourist destination in its own right, with a resort sector containing some of the best hotels, theatres and entertainment establishments in the Sword Worlds. A number of specialist companies offer pleasure cruises to the outsystem or nearby star systems. Some are social in nature whilst others have a strong educational component, with experts aboard to explain phenomena such as storms in a gas giant's atmosphere whilst the passengers experience one during a close pass.

Military and Naval

Tizon's military is geared to the protection of the homeworld and commercial holdings. There is a large and well-funded system defence force but relatively little heavy power projection capability in the form of capital ships and cruisers. The Tizon navy makes use of many multirole vessels, with merchant ships capable of carrying gunboats and fighters for commerce protection or raiding. Most of the time these ships fly with cargo aboard and shuttles for landing it on their grapples but in wartime they can swap them for combat craft.

Tizon thus provides very few major combatants to the Sword Worlds Confederation Navy but its armed merchant cruisers handle a large segment of the logistics, supply, troop transport and rear-area patrol missions for the fleets. As might be expected, these operations are carried out with great efficiency and where a merchant cruiser turns raider, its attacks are precisely calculated to cause the greatest disruption and economic damage.

The system defence fleet and the few jump-capable warships possessed by Tizon are based out of an orbital fortress equipped with minimal manoeuvre drives, enabling to it continually shift orbit in an unpredictable pattern. This makes attack with high-speed kinetic weapons launched from the outsystem very difficult to carry out. The fortress is normally located close to the main military shipyards but can move freely to engage targets on the far side of the planet. Multiple heavy in-system defence vessels are based at the fortress, along with lighter craft which carry out patrols throughout the system and beyond. A minelaying fleet, much of it jump-capable, is also based at Tizon. In wartime its mission is to seed gas giants along an enemy's route of advance or logistics trail, making fuel skimming hazardous. The fleet also acts as a deterrent, as it could be used to make civilian commerce routes untenable deep within an enemy's territory.

Outsystem Holdings

Tizon has few outsystem installations, although it maintains research and prospecting outposts here and there. Mining of moons and planetoids is normally carried out by mobile mining bases or flotillas of small vessels based out of the mainworld's ports. It is widely suspected that these operations cover the construction of outsystem munitions dumps or other facilities but the government of Tizon declines to comment on its preparations for a long war, if any are being made at all.

COLADA

Colada is named, like Tizon, for one of the swords associated with El Cid. Like Tizona, Colada was reputed to strike fear into unworthy enemies. The sword association has no special significance to most Coladans, however. Colada orbits a K2 (orange) main sequence star named Rodrigo after El Cid, which has M8 (red) companion called Bivar. There are seven other terrestrial (rocky) planets in the main system plus one gas giant and a planetoid belt.

Colada is a small world with a standard atmosphere and around 40% surface water. This is largely concentrated into a single ocean, making the interior of the main supercontinent very dry. Settlement was initially around the shores of the ocean, although today virtually the whole population lives on the small continent of Hjartyen in the northern waters.

Colada was devastated by nuclear conflict in the early 200s, rendering parts of the supercontinent uninhabitable and all of it hazardous. Its population is still very low compared to the major Sword Worlds; Colada ceased to be a player in local politics centuries ago although its mercenary forces sometimes exert influence to the homeworld's benefit.

Conditions on Colada have more or less returned to normal in terms of atmospheric contamination and background radiation but many areas remain toxic. Cancer and similar illnesses are more common on Colada than elsewhere in the region, primarily due to hazardous materials leached out of contaminated soil entering the water cycle.

The world has few exports and little industry but found a niche as provider of highly effective mercenaries. The Champion's Guard, as Colada's unified military force is named, is available for hire in part or in whole and has an excellent record. Mercenary work provides a steady – and very large – income for Colada and although much of the funds are spent on maintaining the Guard, the small population are prosperous. It is a prosperity hard won through labour and military service, however.



Society

Colada was a major player in the early development of the Sword Worlds region, standing alongside Anduril and Dyrnwyn in the Triple Dominion until 212. The era of prominence ended with a civil war that turned into a major nuclear exchange, wrecking the world's infrastructure and contaminating much of the arable land. Assistance from outside was not forthcoming. The Triple Dominion collapsed and other Sword Worlds were too busy fighting for dominance in the new order that would eventually emerge to help the people of Colada.

The Coladans struggled to survive and rebuild, gradually moving the surviving population to new homes on Hjartyen. The priority was food production and the initial pattern of steads and farms has survived to this day. Most of the population live in the countryside, in small towns and large farming villages. Many would call this an ideal Sword Worlds lifestyle – free, community-oriented and with plenty of rugged outdoor labour. Life is not easy in the farming villages of Colada but the folk take pride in their efforts to keep the rest of the population fed.

The remainder of the population dwell in small cities and labour in factories to produce what the world needs. Much of this production is military equipment – 'a Coladan ammo dump' is a common phrase for an excessively huge amount of anything. Industrial personnel, like the farmers, work hard to support the military spending of the government, although it is generally recognised that the money made by the Guard improves everyone's standard of living.

Coladan society differs from most of the Sword Worlds in that large numbers of women can be found in all occupations, including hazardous ones. It has been a long time since any job on the world could be considered 'safe' and the needs of society are such that everyone is expected to work. Society is much more egalitarian than elsewhere, sometimes leading to friction when a tough, capable Coladan woman encounters someone who thinks she should be safe at home. 'There *is* no safe at home' has become an unofficial motto of Coladan females everywhere.

Colada Starport

Colada's starport is Class B but until recently it barely qualified. Investment in a series of carefully planned expansions has created a high-class and capable installation which, while traffic volumes have not increased significantly, is now generating far more revenue than before. Turnaround times are good and more ships are stopping to trade rather than refuelling and moving on.

The world's fleet of clean-up scows is based out of a specialist dock at the highport. These vessels carry a group of excavator/earthmover robots used to strip away soil and remove rubble from the 'hottest' nuclear strike areas. Radiation levels are not high at these sites but radioactive and toxic material remain hazardous, especially where heavy rainfall causes them to enter the local water table or be conveyed by ocean currents towards an inhabited area. The removal en masse of topsoil and rubble has been questioned by scientists who believe the effort is not really worth it but the planetary government is willing to invest in removal and dumping on a decaying solar orbit. The resulting pits are unsightly but reclaimed by nature within a few years.

Military and Naval

Colada is officially designated a civil service bureaucracy but in reality it is a military-run state. Remilitarisation began in the late 780s and at first absorbed much of the small planetary budget for little gain. Within a few decades the army had become a symbol of pride and the tool of ego for the planetary ruler and was continually being expanded and re-equipped at the expense of civilian projects. That changed when the force was offered for mercenary service and began generating revenue.

The Champion's Guard fought hard but not always well at first, gradually gaining experience and confidence until it was widely regarded as one of the best fighting forces in the Confederation. Some of the money brought in leaked into the local economy but the vast majority was spent on increasingly frivolous projects that benefited only the planetary elite. Eventually, just after the Fourth Frontier War, the military launched an almost bloodless coup and took charge of Colada.

Today, the Champion's Guard is divided into two segments, known as Base and Field. In addition to providing training, pay, equipment procurement and the usual administrative services to fighting units, the Base branch runs the planet. Military logistics techniques proved eminently suitable for commercial use; military police learned to handle a wider role, engineering units built roads and so forth. The transition is not yet complete but on the whole citizens are much better off than they were 20 years ago.

The Field branch of the Guard is a unified service, with a small squadron of patrol ships to guard approaches to the mainworld. This is based on Colada's moon, which is in the process of being fortified in a similar manner to other Sword Worlds systems. The remainder of the Guard is composed mostly of ground troops who are lavishly equipped and very capable. At any given time a portion of the Field branch is offworld engaging in mercenary activity. It is not cheap to hire but is cost-effective.

The military can be a job for life for a Coladan. Many males and a high proportion of females serve at least one term in Field branch. Most then return home to a job in industry or agriculture; some transfer to Base branch. It is not possible to get a 'government' job without serving in Field branch and although lower levels of government employ a great many young people, the average age of a clerk or minor official is much higher on Colada than elsewhere. These people have all seen active service, although not necessarily combat.

Offworlders are sometimes puzzled to find that departments of the government are termed brigades and commanded by military officers but the structure works and has improved the lot of the average citizen enormously. Colada's population is still small and its importance slight but policy decisions as to where Field branch mercenaries will or will not serve have at times influenced events in the Confederation in a far more subtle manner than Colada's reputation as a planet full of mercenaries might suggest.

Outsystem Holdings

Colada has virtually no offworld holdings, other than a small naval base in its moon. There is a scientific outpost on one of the rocky planets, which occasionally receives a shipment of contaminated soil and rubble for study. Exactly what the Coladans are hoping to achieve there is a matter for conjecture.

JOYEUSE

Joyeuse is named for the sword of Charlemagne, king of the Franks and founder of the Holy Roman Empire (although it was not called that in his day). Although not magical like some of the other worlds' associated weapons, Joyeuse is today a symbol of power and conquest and is revered on its associated world to a degree not seen elsewhere.

The Joyeuse system contains two red dwarf stars; Karl (M3) and Gallas (M9). There are 11 terrestrial planets and one gas giant in the system. Joyeuse itself is small, with about 40% water coverage and a standard atmosphere. At first appearance it seems highly suitable for human habitation but as the early colonists found Joyeuse was not a candidate for 'breadbasket of the Sword Worlds'; quite the opposite in fact.

Joyeuse spins slowly and orbits its dim primary rather quickly. The result is a cycle, just under 25 standard days in length, of 'nightwinter' and 'daysummer', which makes conventional crops very difficult to grow. The temperature drops rapidly at the onset of nightwinter, reaching a low of –45 Celsius in some areas. These extreme temperatures are brief but it is common for an area to be below –20 for most of the dark cycle. The beginning and end of nightwinter are accompanied by strong icy winds blowing in from the coldest areas, as daysummer warms the air elsewhere causing it to rise. This cycle is causing the oceans to dry up, leaving behind chemical-rich salty plains and causing previously fertile areas (by local standards at least) to become semi-desert and badlands.

Joyeuse is also plagued by a problem collectively known as Broedsaed Mange, a number of fungal infestations that attack almost all known flowering plants. This, along with the difficult climate, makes conventional

food production very difficult. Outdoor agriculture relies mainly on fungal crops, with carefully controlled industrial greenhouses used to raise conventional foodstuffs. At any given time at least some of these are ruined by blight. Likewise, livestock have to be kept indoors during nightwinter but are turned out to graze on the local plant life during daysummer. Timing the round-up to get the longest grazing time without losing animals at night is an art all Joyeuse herders seek to perfect.

Society

Joyeuse has a population of around 40 million, primarily distributed in small farming towns. The largest city on the planet houses 250,000 people; most are much smaller. The availability of water, along with shelter from the worst of the weather, dictates the location of most settlements. Disputes over water rights are common, especially in outback regions where there is little regulation. These can be nasty despite only being small, pitting one close-knit community against another over a resource that literally can mean the difference between life and death.

Within the communities, society is extremely cooperative unless some external factor (like the local aquifer drying up) causes a breakdown. If someone starts a job, others will turn up to help without being asked and in return everyone expects assistance when they need it. Outsiders are treated with suspicion until they have 'bought in' to the community with a sufficient degree of effort.

This community spirit has the effect of making settlements generally peaceable and, so long as the all-important water rights are not a problem, helpful towards one another. However, those who do not meet the standard for good citizens are driven out, either by ostracism or physical removal, and these individuals sometimes form communities (of a sort) beyond the social norms. Outlaw villages exist here and there, populated by those motivated only by self-interest and usually willing to take what they need or want from anyone they can intimidate or just kill. Occasionally a town is taken over by one of these groups; more commonly other settlements nearby pay tribute.

Joyeuse is officially designated a balkanised world. It has an overall leader, the Hertug, but his ability to project power or control areas away from the capital is extremely limited. Real power rests with the regional representatives of the Agricultural Board, an organisation set up long ago to oversee food production and now acting as government in all but name. The Hertug is a figurehead who is permitted to formulate foreign policy and direct the military but his position is entirely reliant on the approval of the board representatives.

Each city and major region has a representative heading its own increasingly bureaucratic apparatus. Regulations are in place to limit the damage done by fungal outbreaks and get food to the right places on time. To these have been added a truly strangulous body of rules and procedures for almost everything, making it difficult to coordinate any large-scale project without weeks of legal wrangling.

The population's sense of community is in general a good thing but can result in difficult relations with other settlements or between larger groupings as it creates a strong 'us', which tends to lead to a sense of 'them'. This was one of the reasons for the outbreak of civil war in 1098, although the causes are complex and the various factions have quite different reasons for being at odds with one another.

The Joyeuse Civil War has been ongoing for some years now, sometimes dying down and flaring up again elsewhere. There are multiple factions, not all aligned along state lines, with alliances shifting as one group begins to look like winning and others move to prevent it. The Hertug constantly calls for unity from his stronghold at the capital but lacks the power to do more than become embroiled in a bloody stalemate. The Confederation has wisely stayed out of the situation, issuing advisories to restrict travel to the starport region and otherwise doing no more than trying to prevent conflict from spilling out into space.

Joyeuse Starport

Joyeuse Starport is small but well-appointed, serving traffic passing along the Gram Arm. Relatively little commercial activity goes on there; most revenue comes from docking fees, maintenance and the sale of Joyeuse-made goods to passing vessels. Traffic is light compared to other ports of the arm, even more so since the outbreak of war.

Military and Naval

Joyeuse has a small paramilitary security force in addition to a handful of 'pride' battalions. These are equipped to a high standard and always offered to the Confederation when a crisis emerges. At present they have an unusual status as being under Confederate command but stationed at their homeworld to protect the starport. The pride battalions contain sympathisers of various factions but thus far their professionalism has kept them out of the conflict, other than to deal with attempts to seize or disrupt operations at the port.

The pride battalions are well-equipped and trained, and have a good reputation for reliability. Rather than the usual specialist units combined into battlegroups, each

Joyeuse battalion is an all-arms grav or wheeled-mobile force. They are often deployed as independent battalions by the Confederation military or attached to a larger formation as a 'fire brigade' to deal with situations as they arise.

The local element of the system defence force is small, with a few patrol craft and gunboats, since most of the defence feet is based at the next world out from Joyeuse, Thoslinn. Thoslinn is the primary base for the Confederation Navy and has its own powerful defence force. The command elements of the Joyeuse Fleet, along with permanent Confederation forces assigned to the Gram Arm and the entire Joyeuse navy, are based out of Thoslinn. In peacetime this means there are far more tankers and logistics ships belonging to the Confederation navy present than warships but there will usually be a few major vessels. In a crisis, as the fleets are assembled, capital ships come in to form squadrons which are then sent to deployment areas or held in reserve at the base.

The Thoslinn War College is the premier training facility for high ranking officers and their staff, producing endless what-if scenarios and solutions to them along with trying to solve the problem of how best to make the various fleet elements work together. More junior officers and senior petty officers rotate though constant training programmes, ensuring there is common ground between personnel who may have to cooperate in wartime.

Outsystem Holdings

Joyeuse has no outsystem holdings of any significance.

GRAM

Gram is named for the transport ship that brought the original colonists to this region of space, which in turn derived its name from the magical sword Gram wielded by Sigurd in the Volsungsaga. Sigurd used the sword to kill Fafnir, a man who had been turned into a dragon by cursed gold as a result of his greed. He was then betrayed by his friend and mentor Regin, brother of Fafnir, and killed him too. The sword Gram is associated in modern Sword Worlds culture with righteous deeds, protection from traitors and the slaying of powerful enemies.

The Gram star system centres on the F2 (yellow-white) main sequence star Sigurd, with a distant M2 (red) companion star named Sigmund. There are three gas giants and six rocky planets orbiting Sigurd, in addition to Gram itself. Gram is a little larger than Earth, with a dense oxygen-nitrogen atmosphere and was entirely suitable for colonisation when the first Sword Worlders arrived. The world's surface water is largely concentrated into a single huge ocean, with areas distant from it rather dry but still habitable. The world's atmosphere is now heavily polluted as a result of centuries of intense industrial endeavour.

Gram's supercontinent is, not surprisingly perhaps, named Midgaard, after the world of humans in Norse legend. It is home to around six billion people, most of whom live in the huge cities along the eastern shore of the great ocean. Monsoons result in rampant vegetation, which made food production easy in the early years after colonisation and allow vast expanses of rainforest to exist between the cities.

The capital of Gram, Ny Kalmar, is located in this region along with several major industrial centres. It is half a world away from Falleborg on the western shore of the ocean. Falleborg is a much more recent city, built 150 years ago to house the capital of the Sword Worlds Confederation. Falleborg has its own downport but access is restricted to official traffic and vessels bringing necessary materials for the city's modest industrial base.

Society

Gram has a hereditary monarch but the post no longer has any real political significance. However, as one of the 20 most powerful noble houses and the one with the grandest history, the Storhertug (as the monarch is known) is an extremely powerful player in Gram's politics. Below the royal house are the Hoiadennir, or hereditary nobles. There are around 38 Jarlenir and 400 or so Grevenir at any one time. The Storhertug can promote a greve to jarl or elevate a non-noble to the office of greve, although this requires the consent of a majority among the existing nobility.

The hereditary positions of these nobles do not give them any intrinsic power; it is their holdings that make them influential. Thus a greve who lost his economic or technological powerbase would still receive the traditional courtesies but his powerlessness would be recognised. In all probability he would be despised as a failure, although insults would have to be couched in the most respectful of terms to avoid offending those who retained power to go with their title.

The baronir, or middle nobility, are the real powers on Gram. The higher nobility often hold several titles as baronir, or have traditional ties with them as recognised superiors, and thus wield power as multiple-baronir. Most of the baronir are owners of large companies or similar economic institutions and it is this one thousand or so individuals who run Gram. Some baronir run a business directly; most employ others to do it and spend their efforts elsewhere. This may be politics, the military, or other endeavours. Some of the greatest explorers and even the occasional scientist have been members of the

middle nobility who could afford to pursue a hobby to the point of interplanetary excellence.

Below the baronir are the lower nobility; the friherrenir or lavadelnir. These minor nobles are for the most part created by the barons they serve. Many senior posts such as business executives or project heads come with a noble title attached and it is common to pass the title on to a relative. However, this is at the discretion of the baron making the appointment and not guaranteed. Commonly, a talented relative will be selected to follow the existing minor noble and will train for years until he is an obviously suitable replacement.

Noble status – in title at least – is maintained even if requirements for holding that post are lost. A minor noble family that does not produce someone suitable to take over the original post or a major noble who no longer has sufficient holdings to justify his title, will continue to be considered noble so long as they act the part and keep up appearances. Some are very unkind to disenfranchised unfortunates but if the former noble keeps playing the game, others have to do so as well – at least outwardly. Often former nobles will be recruited for a risky endeavour on behalf of someone who does have power, trading service and potential ruin for a chance to regain status.

Each noble house employs large numbers of staff, security personnel and administrators in addition to workers in whatever sectors it has interests in. The vast majority of the remaining population work in support and commercial sectors, dwelling in crowded cities where the lifestyle is very far from the Sword Worlds ideal. A segment of the population does still live 'traditionally', in small towns and farmsteads in the countryside. In these places, they embody Sword Worlds virtues of self-reliance, honest conduct towards neighbours and hospitality to strangers. The cities are quite different.

The large urbanised population of Gram is necessary to its industrial output, which in turn was essential to the development of the Sword Worlds as a whole. Jamming a population together in close confines made the traditional lifestyle impossible and created a breeding ground for crime. As a result, the cities of Gram have strict laws and large, heavy-handed police forces. The free and open interchange between people seen elsewhere is replaced with a jostling, suspicious and stressed attitude that often spills out as disputes and violence. The cities of Gram are, with the exception of nobles' compounds, rather unpleasant places.

The citizens of Gram are envious of those who get to live the idealised lifestyle of the yeoman farmer or small-town craftsman and are strangely resentful-yet-proud of the fact they are locked into a life of technological drudgery. Their sacrifice is what made the Sword Worlds Confederation possible and this – along with the fact that they are the original Sword Worlders – makes the average citizen sure they are better than anyone else in the Confederation.

A citizen of Gram is likely to expect others to be grateful to them for their sacrifice, which makes an 'easy' lifestyle possible and respectful of their status as a descendent of the First Colonists – it is always capitalised when a Gram resident says it. They also have a lot of resentment towards 'traitors' who deny Gram's status as the centre of the Sword Worlds and are secure in the knowledge that their homeworld is named for a sword that slays traitors. Gram produces more emigres and expatriates than any other Sword World and the attitude of these people goes a long way towards explaining the stereotypes perceived by outsiders.

Gram Highport and Orbital Installations

Gram Highport is unusual, in that it is built into an asteroid moved – at great effort and expense – into orbit for the purpose. Previous, smaller ports were dismantled and components used elsewhere once the current port was operational. There are three segments to the port, connected by transit tunnels within the rock. The main port serves general commercial traffic and has a steady stream of small vessels moving in and out of its docking bays and tunnels. An extensive startown serves this port and is maintained in excellent condition as a showcase of Gram's wealth and status. Indeed, most businesses in the startown and port are subsidised on condition they meet stringent requirements and business licenses are assigned to those favoured by the ruling nobility.

The industrial sector has its own docks, capable of handling small and mid-sized freighters. The largest ships moor at buoys in space close to the port and are served by barges based at the commercial installation. These bring goods and raw materials into the industrial sector or take them directly to other ports on Gram or elsewhere in the system. Most of the industry in this sector is specialised, supporting the port, the naval installation or starfaring commerce in general. General industry is located planetside.

The naval sector of the port-asteroid is part base, part fortress. It controls enormous missile batteries scattered across the surface of the asteroid, with beam emplacements to protect against small craft attack. In the event that Gram were attacked from space, the naval sector of the highport could engage vessels around the curve of the planet providing midcourse guidance was available. Its stockpiles of munitions are vast, as are other supplies, enabling it to hold out and keep fighting for an extended period. The naval sector also serves as

home for the world's patrol and light defensive forces, and maintains strict control over orbital space.

On the far side of Gram from the orbital port, in a custom-built chain of installations, are the system's main starship yards. Here, naval and large commercial vessels are constructed for clients across the Confederation. Most ships are constructed at TL12, the best the Confederation can produce, but lower-tech craft are sometimes built for clients who cannot maintain top-end designs. The main yards do not build ships for non-Sword Worlds clients but other, smaller, facilities do.

The yards have a small patrol force based out of their docks, armed with missile launchers like more or less everything else in orbit around Gram. Orbital space is defended by large and small weapons platforms; armoured space stations equipped with a minimal manoeuvre drive to allow them to unpredictably change orbit. The dance of these hundreds of orbital defence platforms is intricate and rather beautiful but does make approach to the planet hazardous for unwary pilots. Getting too close to a platform will result in a curt warning, after which a suspect craft will be fired upon. It is considered wise to follow traffic control instructions closely.

Military and Naval

Gram's main naval base is located on its moon, which is an entirely military presence and off-limits to all traffic. The moon's surface is covered with small bases, each controlling a large battery of missile launchers and a huge stockpile of munitions. Many also house a group of fighters or a gunship in an underground hangar-bunker. This dispersed force would be extremely difficult to eliminate in the event of an attack and could continue the fight even if the main base were destroyed.

The naval base has landing pads for large numbers of small and large ships, and surface cradles for a handful of major warships. Most such vessels remain in orbit, however, receiving maintenance in the facilities located there or supplies by way of a shuttle fleet. This is the home base of the Gram Fleet and always heavily protected by a non-jump-capable fleet that covers the mainworld too.

Patrols are maintained to the rest of the system, of course. These are mostly mounted by the Gram system defence fleet but the interstellar fleet often detaches a destroyer or two to sweep for concealed intelligence gathering vessels or replenishment caches concealed in the outsystem. The chances of stumbling upon anything are slim at best but the patrols provide a useful training opportunity and might serve as a deterrent to long-sighted potential aggressors.

It is widely publicised that the system's three gas giants are heavily mined, with minelaying craft tending the fields and orbital installations controlling them. This is part of the deterrence strategy favoured by Gram's military planners. An invader would find it hard to obtain fuel without conquering the mainworld and that is not an easy task; an invasion would be an all-or-nothing affair, risking the total loss of a force trapped in the system.

Outsystem Holdings

Gram maintains mining and industrial settlements on other bodies of the system and among the gas giant moons. Few of these are large but their cumulative input to the mainworld economy is considerable. Petrochemicals skimmed from the gas giants along with minerals mined on their moons are brought to transit bases and shipped home for use in the factories of the cities. There is little industry in the outsystem, other than that required to support extraction operations. This is in part because Gram had a major industrial base before these operations began and partly due to unwillingness to repeat history. There is nothing much that can be done about colonies betraying their allegiance to Gram and setting up as independent worlds but Gram's leadership are determined that their raw materials will not be doing the same thing, so outsystem holdings are kept dependent on Gram itself. Gram can survive without these installations but the converse is not true, so Gram accepts a reduction in efficiency in return for increased security.

TYRFING

Tyrfing is named for a magical but cursed sword that had to kill once unsheathed and which caused evil deeds to be done. It was wielded by Hervor, a female warrior who won many victories but eventually decided to retire. The cursed sword passed to her son Heidrek and made him kill his brother. Tyrfing brought Heidrek great victories and helped him win a kingdom but also brought about his murder. The sword Tyrfing has no special significance to the people of this world but is sometimes used as a metaphor for their own tidally locked planet with its bright and dark faces.

Tyrfing's primary is the M2 (red) main-sequence star Angantyr, named for the father of Hervor who forced dwarves to make his magical sword. Their displeasure was the reason for the curse. The system also contains one gas giant and four terrestrial planets. Tyrfing itself is a small world with a very thin atmosphere. It is tidally locked, with one side permanently facing its star. Most of the population dwells in the twilight zone between the bright and cold faces. Conditions are less extreme on the bright and cold faces than on many tidally locked worlds, due to the presence of an atmosphere. The



oceans of the cold side are partially frozen and the hot side is cooled by winds blowing across the twilight strip.

Society

Tyrfing's population of around 70 million is ruled by a hereditary noble class referred to as jarls, with commoners called carls in the ancient Norse manner. Only the nobility has governmental power, although some jarls are heavily influenced by their people. The population is dispersed in small towns and domed farmsteads, with few cities of over 100,000 people and only one – Munarvag, the capital – over 200,000. This precludes the development of much of an industrial base.

The people of Tyrfing are, for the most part, adherents of 'primitive' Aesirism – they would call it 'correct' Aesirism. Rather than priests leading formal religious observances, primitive Aesirists follow the old ways in which each person has a direct relationship with the gods. Tyrfing has the highest proportion of true believers anywhere in the Sword Worlds Confederation and the lowest tolerance for 'cultural' Aesirists. Its people are also less welcoming and open to outsiders than elsewhere. Hospitality is available but grudging and guarded until the newcomer has proven trustworthy.

Tyrfing Starport

Tyrfing's highport is a modest affair, capable of handling a large volume of traffic but not in any way impressive. Its design is unusual, with a central hub area having only shuttle docks and several specialist ports handling different types of traffic. Business, recreation and passage planetside are by way of the central hub, but no starships dock directly there.

This design allows a module to be replaced without overhauling the whole structure but requires a lot of shuttle traffic within the port.

Military and Naval

Tyrfing has a modest planetary army trained for operations on the bright and dark faces as well as in the more normal conditions of the twilight region. Its system defence fleet and jump-capable forces are large considering the population and economy, consisting mainly of ships built at Gram and paid for by interstellar commerce. A significant portion of the army is capable of acting as naval infantry at need.

Outsystem Holdings

There are extensive mining operations ongoing in the gas giant moons and outer rocky planets. Most metals and minerals extracted are conveyed to the highport's specialist bulk docks for sale under contract to the major industrial powers of the Confederation. A smaller proportion is sold on the open market and a little is used in the world's economy. Repeated attempts have been made to create an industrial complex in the outsystem but all such projects have been underfunded and fallen short of their goals.

BEATER

Beater enjoys unique status as the meeting point of the Gram and Sacnoth arms. It is part of both and neither, and sees the highest volume of commercial traffic anywhere in the Confederation. Beater is named for a magical sword wielded in the works of JRR Tolkien, who was heavily influenced by Norse and Old English myths.

Beater is the common name of the weapon; it is also known as Glamdring, or foe-hammer. The associated sword has significance in Beater's culture, with various companies and establishments vying for ownership of the name. Thus it is possible to drink a Foe-Hammer Ale at the Glamdring Bar and Grill, over the road from another establishment with the same name.

Beater orbits a K4 (orange) star named Gawaine, after a knight in the Arthurian legends. There are nine terrestrial planets in the system along with a planetoid belt but no gas giants. With a dense atmosphere and reasonable amount of surface water, Beater is something of a hothouse with a vibrant ecosphere. Not surprisingly, it was a good candidate for early development, rapidly becoming a breadbasket for colony missions going on elsewhere. Establishing farms and ranches was no easy task, however.

Beater's combination of low gravity and dense atmosphere allowed the development of many species of megafauna, as well as some that straddle the line between plant and animal. Some plants have animal characteristics and can actively threaten humans nearby, whilst some animals can survive long periods of dormancy or obtain energy by photosynthesis.

The six million or so inhabitants are dispersed in small towns surrounded by agricultural lands and hunting preserves. Safaris – photographic and lethal – are part of a thriving tourist industry, whilst produce from farms is the backbone of the economy. Keeping the local wildlife and aggressive plant species out of the crops is a full-time job and often hazardous. A corps of rangers exists to deal with more serious infestations or dangerous creatures and several honourable jaeger associations are drawn from its ranks.

Society

Beater offers what many Sword Worlds would consider an ideal lifestyle, since working a small farm is both profitable and hazardous. Teamwork and the ability to handle machinery or robotic assistants are essential to success and leaders of those teams earn respect in tough situations. A smallholder can be effectively the lord of a small kingdom, leading followers and dispensing gifts among them to reward loyal service. To an outsider, the mutual adulation of two neighbouring landowners can border on parody but these are successful men who recognise what the other has had to deal with and who reflect one another's glory.

The government is a distant bureaucratic apparatus that imposes a great many rules with even more exceptions. The blanket ban on most weapons applies only in the largest settlements; elsewhere there are exceptions for members of the local militia, exceptions for licensed security operatives and exceptions for those who require weapons to defend their property from man or beast. These exceptions come with obligations and duties, which translates to a requirement to properly license weapons, store them sensibly and practice marksmanship.

Beater Starport

Beater's highport is one of the largest and certainly the busiest in the Confederation. It is not Class A as there are no starship yards but in terms of economic throughput and starship tonnage handled it is more than worthy of the rating. The port is built as a single unit shaped as a thick disc with protrusions on the upper and lower surfaces. Docking bays circle the ring, many privately owned or leased by a commercial entity. Some of the latter are ship operators; others need a dock to service their facilities or run one for profit.

The availability of multiple privately owned docks at Beater creates intense competition to attract passing vessels or secure contracts to support the ships run by a small merchant line. This in turn leads to bargaining between dock owners and ship operators, although most ships passing through Beater still use the main docking areas for convenience.

Military and Naval

Beater's army is very small, although well-equipped, and is supplemented by a large number of militia and jaeger units. Some are capable of deploying offworld, with additional equipment provided from local stocks. Beater is renowned for providing enthusiastic if rough-and-ready volunteer formations to the Confederation.

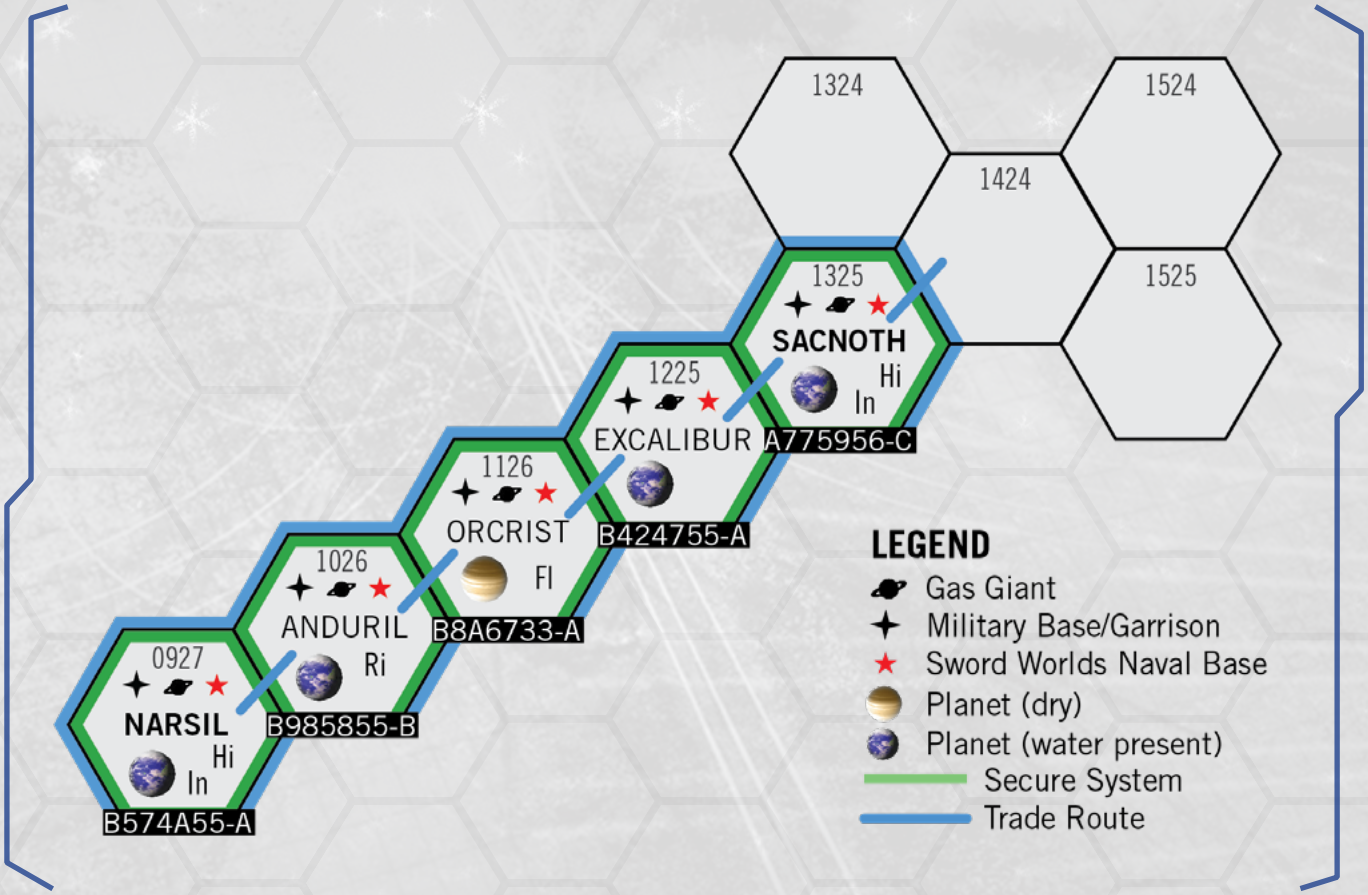
The navy is much more formally organised. It is much larger than the world's industrial base can support and paid for out of revenue from interstellar trade. Not surprisingly, a large proportion of Beater's vessels are not jump capable and most of the remainder are patrol ships best suited to policing and protecting commercial traffic. Many of Beater's larger merchant vessels can carry gunboats and fighters, allowing them to assist with security operations or undertake 'secure merchant operations'. Most of the time this means speculative trading with a strong means of self-defence but an armed merchant can easily turn raider.

Outsystem Holdings

The Beater system has a few outposts and mining installations but is not heavily exploited.

THE SACNOTH ARM

The Sacnoth Arm runs from Narsil to Sacnoth and is sometimes claimed to contain Beater and Hofud as well. Along with the Gram Arm it is considered the heartland of the Sword Worlds Confederation and not surprisingly competes with the Gram Arm for recognition as the most important part of the subsector. The Sacnoth Arm receives a little less external commerce than the Gram Arm, since it does not offer a jump-1 link from Imperial to Darrian space but is otherwise able to compete.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Narsil	0927	Naval, military	B574A55-A	Hi, In	—	G
Anduril	1026	Naval, military	B985855-B	Ri	—	G
Orcrist	1126	Naval, military	B8A6733-A	Fl	—	G
Excalibur	1225	Naval, military	B424755-A	—	—	G
Sacnoth	1325	Naval, military	A775956-C	Hi, In	—	G

NARSIL

Narsil is named for a magical sword in the works of Terran author JRR Tolkien, wielded in battle against the Dark Lord Sauron but broken during the fight that led to his defeat. It was later re-forged into a weapon named Anduril that was again carried against Sauron. Of all the Sword Worlds, Narsil is the one where its namesake sword holds the least significance, although a good way to antagonise people from Narsil is to remind them that 'their' sword failed to withstand the rigours of battle.

Narsil orbits an M0 (red) giant star named Isildur, which has an M0 (red) companion. The system contains four gas giants, two planetoid belts and three terrestrial planet, as well as Narsil. The system once had several more planetary bodies but Isildur has entered the red giant phase at the end of its stellar life cycle and is swelling up to engulf the inner system. This will take millions of years and in the meantime the previously barren world of Narsil was warmed enough to change it from a barren rockball to a potentially habitable planet.

Narsil's ability to support humans owes much to the intervention of the Ancients. Narsil has not had time to develop a breathable atmosphere and ecosystem of its own but terraforming efforts around 300,000 years ago have produced a breathable atmosphere, albeit one with a low partial pressure of oxygen. Narsil's atmosphere is acceptable at low altitudes but artificial assistance is required at any sufficient elevation. It is also tainted as a result of heavy industrialisation.

The Ancients could do nothing about Narsil's eccentric orbit, which takes it from around 80 to 120 AU from the primary. At present the majority of the surface is covered in ice, which floats on deep oceans. The 40% water coverage figure considers pack ice as 'land'; as the primary continues to expand and Narsil receives more heat, water coverage might be near total.

Narsil was settled in –204 from Anduril. The colonists were surprised to find Terran species on-planet, presumably transplanted there by the Ancients. This allowed populations to be moved to other Sword Worlds and partially accounts for the amount of Terran creatures found throughout the region. The world was part of a union with Anduril known as the Double Monarchy from 44 to 604 and today is the most heavily populated world in the Confederation.

Society

Narsil was developed as an industrial colony and quickly developed into a powerhouse whose industrialists became the nobility. Cities are built on 'rafts' atop the pack ice or in a few rare cases float on the warmer equatorial oceans. The population of around 20 billion is fed by aquaculture in the central regions and artificial farmland surrounding the ice-top cities. Each agricultural zone is built on its own raft and uses soil painstakingly created by artificial means.

Cities are crowded and tightly controlled, partly due to the need to conserve resources in such a challenging environment. Narsil citizens tend to be content with their lot, having been indoctrinated to respect their superiors and accept the social order. The majority are employed by one of the 31 huge business conglomerates that make most of the planetary economy and whose owners are the upper echelon of society. There is some unrest, which seems to be growing but at present the rebels are disorganised and, for the most part, half-hearted.

Narsil Starport

Most of the trade from the Sword Worlds into Darrian space goes through Narsil and it is the turnaround point for internal commerce on the Sacnoth Arm. The orbital port is large and well-equipped, handling huge imports of raw materials and exports of finished goods. The port is jointly owned by several major businesses and run with ruthless efficiency. All services are right on the line between overpriced and expensive but good value; quality of service is high but nothing comes cheap.

The commercial docks are extremely busy with large freighters; smaller ships are dispersed to subsidiary docking areas better suited to them. Large numbers of in-system transports operate out of a specialised facility which deals mostly in bulk raw materials.

Military and Naval

Narsil has the largest population and one of the biggest industrial bases in the region. Its defences are, as expected, formidable. The military is primarily geared to defence and control of the cities, whilst the system defence fleet is one of the largest in the Sword Worlds. Not long before the Fourth Frontier War, Narsil tried to raise its status as a political player in the region, expanding its jump-capable fleet accordingly. Although this initiative has been curtailed, it means that Narsil has some of the newest and most potent jump-capable vessels in the Confederation. These are mostly based out of an installation in orbit around the nearest gas giant but there are always capital ships near the starport and others on patrol along the Sacnoth Arm to remind all and sundry of Narsil's status.

Outsystem Holdings

Narsil has extensive outsystem holdings, with large mining installations throughout the system and a few small cities on moons and rockball worlds. These all

feed back into the homeworld's voracious industrial complex by way of a web of in-system spacelanes. There are also scientific installations dedicated to studying Isildur and attempting to predict the effects of its continued expansion.

ANDURIL

Anduril is named for a magical sword re-forged from the remains of Narsil in the works of JRR Tolkien. The image of a broken thing remade into a powerful unified whole is frequently used by the planetary government when promoting unity.

Anduril orbits a highly active F2 (yellow-white) star, along with six terrestrial planets, two gas giants and two planetoid belts. Its dense atmosphere is subject to incredible storms that can flatten almost any structure, with winds exceeding 200kph. The world's surface is about half covered in water, with two large continents separated by a narrow belt of sea. It has a very severe axial tilt – around 53 degrees – which causes enormous changes in the seasons.

The world's extreme weather requires an unusual attitude to building; structures are low and usually protected by sheltering terrain features or artificial berms shaped to deflect the prevailing winds. Most major buildings have a storm shelter and every town has a communal shelter. Cities on Anduril are mostly underground, with only a few essential buildings poking up into the wind. Many live almost entirely underground, emerging only when they absolutely have to. However, much of the time the world has a pleasant, Earth-like climate and is entirely habitable. It is only during the solstices, when the effects of the tilt are the most extreme, that the most destructive storms appear.

Society

Unlike most of the Sword Worlds, Anduril was the subject of multiple colony expeditions at roughly the same time, creating several hubs for expansion and distinct cultural regions. The main colony was set up from Sacnoth but others were created by dissidents of various worlds, creating a situation in which different segments of the population displayed resentment for or antipathy towards the worlds left behind. The world was unified – not without resistance – during the Sacnoth Dominate and has remained a single culture for most of its history. However, some regions have attempted to assert their independence and Anduril was fully balkanised by the outbreak of the Third Frontier War. Today, it is once again a single state but various regions have their own cultural flavour and the degree of unity exhibited by the population can vary considerably.

The 200 million inhabitants are governed by a typical Sword Worlds 'freemen and nobles' system, with considerable social mobility for those with the talent or luck to take advantage of opportunities as they arise. The world's resilient industrial base is mostly located underground, in well-planned complexes connected to the starport by orbital craft and large grav vehicles. Anduril is renowned for its munitions factories, which supply the militaries of other worlds and export beyond the Confederation. This and other industries create a constant need for raw materials and provide the world with a large income.

Citizens enjoy a high standard of living and excellent education system. Most prefer safe lives within the underground cities but there are still plenty of rugged outdoorsmen. These tend to be a little contemptuous of the 'townies', creating yet another divide in an already fragmented society.

Anduril Starport

Anduril's starport complex consists of a large downport on the subcontinent of Kleinland and numerous smaller ports serving the main cities, plus a truly huge orbital installation. This features a modular construction that permits new sections to be added or redundant ones to be removed or placed in one of the reserve sectors. These are sections of the port that have been mothballed or stripped of their most expensive fittings and moved to a position where they can be safely ignored most of the time. Some segments are reactivated, others repurposed and a few towed across the system to create a small orbital facility elsewhere.

The highport has a modest naval sector and huge commercial area divided into interstellar and in-system areas. Large ships usually dock at gantries and here and there are hulks of vessels that never left. Some are being slowly renovated or stripped, others co-opted as additional storage space and will probably never operate under their own power again. Hulks are, like redundant modules, supposed to be moved to reserve areas but the process is always delayed whilst buyers wrangle over the remains of the vessel and the authorities decide whether it is to be recommissioned or written off.

Military and Naval

Anduril's military is small in proportion to its population and wealth, although it is still very significant in absolute terms. Much of the available naval tonnage is dedicated to defensive vessels, non-jump capable ships for the protection of the Anduril system and short-range heavy units intended to oppose an attack from Darrian space. Those few fleet-mobile warships operated by Anduril are generally considered to be inferior in fighting

power to equivalent vessels serving other worlds, a result of poor training and lack of fighting spirit among the crews. This also applies to the ground forces and may not be entirely fair. It will take a major conflict to demonstrate whether the armed forces of Anduril are really as poor as their critics claim.

Outsystem Holdings

The Anduril system has numerous industrial and mining facilities, with a large in-system commercial fleet to serve them. About half of all the offworld economic assets are located in the inner planetoid belt but there are facilities out on the very edges of the system and regular naval patrols to support them.

ORCRIST

Orcrist is named for a magical sword – also known as Biter – in the works of JRR Tolkien. The people of Orcrist do not attach great significance to their world's associated weapon but Orcrist themed bars, restaurants and merchandise are common in areas frequented by offworlders. This creates a false impression that the sword Orcrist is venerated on its name-world, whereas in fact it has more to do with extracting money from gullible visitors.

Orcrist is a moon of the gas giant Dvergur, which in turn orbits the K7 (orange) star Thorin, which has an M7 (red) companion named Thranduil. Dvergur has no other moons and the other six terrestrial planets of the system are iceballs orbiting far outside the habitable zone. Orcrist is thus the most useful world in an uninviting system.

Orcrist has an unbreathable carbon dioxide-nitrogen atmosphere and 60% coverage of liquid other than water. Several attempts have been made to improve this environment, with two large-scale terraforming projects and various smaller initiatives. The current effort is unusual in that it is a loose team effort by many minor participants, collectively called the Orcrist Soil Manufacturing Project. Cooperation and mutual assistance is strongly encouraged but there is no central control. Instead, everyone knows the goal and has guidance on how they can contribute. The natural desire of Sword Worlds to outdo one another has produced some spectacular, if small-scale, efforts and the project is actually getting somewhere. With oxygen-producing algae in the seas and areas of useful soil being created, Orcrist is inching towards habitability.

Society

Orcrist was colonised, after a fashion, from Sacnoth as a waypost en route to more useful systems. A small starport was set up in -208, which slowly expanded to become what was, in effect if not in name, a colony. A modest mining and ore processing industry existed by 200 but the demise of the Triple Dominion left Orcrist without backing or support. The population, mostly miners and industrial workers, managed to make the transition to an independent state and attracted sufficient immigration that the population increased to viable levels.

Orcrist enjoyed a short period of independence. It was annexed by Excalibur in 388 in a blatant piece of strongarm diplomacy – Excalibur was not a powerful



state but had space-going warships and Orcrist did not. In the mid-400s Orcrist became a possession of the Double Monarchy of Anduril and Narsil and was later a colony administered by Narsil. Today, Orcrist is once again independent but its people have a different outlook to most other Sword Worlders. Where other worlds have been players on the political stage and feel entitled to a big part in events concerning the Confederation, Orcrist does not have these traditions and tends to look to its own affairs.

Orcristers are very community-oriented, which applies to anyone from their homeworld. Citizens will go to great lengths to help one another out even when there is nothing to gain. Offworlders have a different status; Orcristers are generally helpful but see outsiders as a source of revenue. It is sometimes hard to find a line between legitimate business and a scam targeting offworlders, if one exists at all. Anyone in trouble will be helped providing they are not doing something so stupid they deserve to be left to their own devices but there will always be an angle.

The government of Orcrist is a peculiar institution. The world has a class of hereditary nobles who are theoretically all members of a parliament. In practice, decisions are made by those who choose to attend parliament, led by whomever has the most influence. Big decisions that affect the status quo are hard to push through, so Orcrist tends to have a great deal of governmental inertia. The situation is tolerable to everyone and liked by many, so is unlikely to change in the near future.

Orcrist Starport

Orcrist's current starport is a large installation but one tailored to the economy of the mainworld. 'Extensive and expensive' is how many visitors describe it. Most services are overpriced, although regular or favoured customers can obtain discounts through various schemes or associations. Much of what comes through the port is large shipments of industrial goods produced on Orcrist. Whilst not the most advanced in the Confederation, these items have a good reputation for reliability and quality of build and find a ready market elsewhere.

Military and Naval

Despite its significant industrial base and population of 40 million, Orcrist has a small military and navy. It contributes more than its share of funds to the Confederation budget but its own navy is almost entirely defensive in nature.

Outsystem Holdings

Orcrist has no significant outsystem holdings.

EXCALIBUR

Excalibur is named for the legendary sword of King Arthur, which had a scabbard that prevented Arthur from being wounded. In early versions of the tale the weapon is called Caliburn. Natives of Excalibur are not unduly concerned with connections to their name-sword but they quickly correct anyone who claims Excalibur was the Sword in the Stone. That, they will (correctly) state, was a different weapon.

Excalibur orbits and is tidally locked to its K5 (orange) primary, Artur. There are two gas giants and seven other rocky planets in the system. Excalibur has three moons. Two are small rockballs of no great consequence whilst the third, Bedwyr, is a recently captured body. Its orbit is still stabilising, as it arrived only 4–5,000 years ago.

Excalibur itself is a small world with a very thin, tainted atmosphere and 40% water coverage consisting mainly of a large sea in the northern hemisphere. Its ecosystem is very unusual due to resonance with Artur, the system's primary. The planet rotates three times for every two orbits, creating 'days', which are incredibly hot and lethally cold 'nights'. Vegetation cannot survive night-time temperatures and few plants can live at the height of the day, so Excalibur sees extremely rapid growth, flowering and seed production in the 'morning' and late 'afternoon'. The rest of the time it is barren.

One consequence of this is the evolution of creatures known as 'striders', which constantly circle the globe on long, spindly legs. One group of striders follows the dawn, another moves ahead of the sunset, in a constant chase. They live in a world of plenty so long as they keep pace with the growing season and lay eggs that hatch in a later cycle.

Society

Excalibur's 40 million or so inhabitants are ruled by a hereditary nobility that is becoming increasingly unpopular. The oligarchs spend much of the world's revenue on scheming against one another or initiatives to increase or secure their power. Insurrections have been rare but there is significant unrest in many population centres.

Excalibur Starport

Excalibur's highport is supposedly neutral ground in the schemes of its nobility, since it is essential to the economy of the world as a whole. In practice, it is a hotbed of economic warfare between the nobles. Visitors can become victims of political schemes or find themselves presented with a startlingly good deal if they arrive at just the right time or have something a noble wants.

The result is a rather turbulent environment not conducive to good business and increasingly the port is becoming a fuel stop rather than a place to do business. The downturn is obvious to those who know what to look for but for most visitors little has changed in the frenzy to part offworlders from their cash.

Outsystem Holdings

Excalibur has a few outposts dotted around the system and one significant site on its moon Bedwyr. This captured body brought with it the ruins of a base built by a starfaring culture – probably but not conclusively proven to be, Droyne. The ruins were constructed at TL9 around 20,000 years ago and now completely abandoned. Exploration is hampered by the local political situation, since none of the nobility dares risk someone else's team making a good find.

Military and Naval

Excalibur's military is made up of contributions from the forces of major nobles and subdivided by internal politics and mistrust. Loyalty to an overlord is more important than competence, although most formations are effective enough at the small-unit level. Service to a lord is rewarded by higher status and better living conditions, so recruitment is not much of a problem despite the majority of the population being reluctant to serve the interests of nobles they do not trust.

Excalibur can contribute a large number of small warships to the Confederation's fleets but no major combatants. Its forces tend to be scattered on patrol and escort duty as a result and have no strong naval traditions.

SACNOTH

Sacnoth was named for the magical sword in Lord Dunsany's tale 'The Fortress Unvanquishable Save for Sacnoth', in which a rather bland hero is led to victory over an evil magician by the sword Sacnoth. This tale has found its way into modern Sword Worlds culture, with the mythical weapon and world of Sacnoth both portrayed as 'the sword that leads the way'.

Sacnoth was chosen early in the colonisation of the Sword Worlds to be a major industrial centre, receiving a large proportion of development funding and personnel. It quickly became a powerhouse, contributing to the rapid development of other worlds and emerged as a power among the new colonies. Throughout its history Sacnoth has challenged Gram, one way or another, for leadership of the Sword Worlds. Today it is the most powerful industrial centre in the region.

Sacnoth orbits an F9 (yellow-white) main sequence star named Leothic, which has an M3 (red) companion named Tharagavverug. The primary system contains one gas giant and five terrestrial planets in addition to Sacnoth itself. Sacnoth has around 70% surface water, with three continents all connected by land bridges. Its standard atmosphere is noted in the navigational databases as having a taint but none can be detected by any means. However, there is definitely something in the air on Sacnoth; those who live there seem to suffer age-related sickness sooner and random ill health more often than inhabitants of other worlds. People who move away from Sacnoth to live elsewhere do not seem to take the tendency to early aging with them and those who immigrate start to display it after a few years. No cause has ever been determined but many theories have been put forward over the centuries.

Sacnoth's main downport is located on the largest of the Halsband Islands, off the coast of the central continent. It is connected to the capital, the city of Foerstaberg, by a chain of gravports built along the route of an earlier railroad system. This still operates, although today it carries raw materials and bulk goods rather than passengers. The rail link runs through a tunnel linking the islands to the mainland and burrows through high ground at various points on its route inland.

Society

Sacnoth's feudal technocracy is based upon principles set out by the first colonists, the families and followers of a group opposed to Gram's government of the time. It is claimed that these settlers sought to escape the tyranny then prevalent on Gram and create a freer and more worthy society but there are many who suggest that what they really wanted was to be in charge. Be that as it may, the planners and world-development officials in the group cleverly arranged for their own supporters to be selected as colonists for Sacnoth and for them to receive lavish support.

It may be that the plan to create Sacnoth as an industrial centre originated as a means to further the agenda of the breakaway group rather than – as is widely supposed – a deliberate step in the development of the region. Either way, it worked. Sacnoth quickly went from being a colony to be supported to an economy that could stand on its own merit and – in theory at least – contribute to the development of other worlds. In practice most of what was manufactured on Sacnoth stayed on Sacnoth, with participation in wider projects repeatedly deferred in favour of expansion of Sacnoth's own industrial base. This was presented as investment for the future of the region but ultimately benefited Sacnoth to the exclusion of other worlds.

Economic and industrial development attracted new colonists but Sacnoth was already firmly under the control of its new owners. Most arrivals joined carefully planned settlements, which already had a leadership class in place and thus became subordinate to the original colonists. In time this developed into an entrenched ruling caste who controlled various aspects of the world's infrastructure and economy. Despite centuries of change and the occasional balkanisation of the world, this system is still in place.

Major companies and corporations, assets such as starports or shipyards, and in some cases whole cities, are controlled by a small elite. Their powerbases vary and sometimes overlap, which can create friction and internal divison. When someone who controls a major city's energy generation finds themselves at odds with the owner of a major industrial facility, the situation needs to be resolved quickly to avoid disruption. Negotiation among leaders is commonplace, with assets or territories changing hands on a frequent basis. This usually has little effect on citizens, at least on a day-to-day basis but can cause major political upheavals from time to time.

Sacnoth Starport

Sacnoth's main downport is surrounded by groundside shipbuilding yards and supporting industries, which also feed orbital yards. Sacnoth builds vessels for its own navy, and those of other Confederation members and also produces large numbers of inexpensive atmosphere-capable trade vessels. These are popular entry-level craft across the subsector and beyond, with a reputation for simplicity and reliability. Most never return to the surface of Sacnoth once they complete their trials but pass through the system from time-to-time.

The large orbital port is capable of handling hundreds of small trading vessels at once, along with numerous larger ships. It consists of two primary structures, one housing the commercial port and one the main shipyards, with a web of smaller components in a belt around the central area that connects the two. This gives the impression of 'a dumbbell thrust through a hoop' as a visiting ship approaches.

Large freighters normally dock at external arms that contain unloading and passenger transfer machinery but it is a point of pride that even the very largest commercial starships in the Sword Worlds Confederation can be accommodated in the colossal main docking area. Favoured operators are permitted to bring their best ships inside in this manner, creating an occasion that always causes a mild stir in the media. The port is otherwise standard with the usual security, patrol and defence forces. It is not configured as a naval base, however; major warships do dock at the port but their home is elsewhere.

Military and Naval

Sacnoth has the largest system defence fleet in the Confederation. There are always heavy warships close to Sacnoth itself to defend against surprise attack but the system defence fleet is home-ported at an orbital installation around Welleran, the next world out from Sacnoth. Elements are tasked with the defence of Welleran Base but much of the fleet is assigned to either the Homeworld Defence Zone or the main fleet base at Allathurion, with lighter units dispersed all over the system on patrol or guardship deployments.

The system's single gas giant, named Allathurion after the village saved by Leothic (the wielder of Sacnoth) in Dunsany's classic tale, is a potential fuel source for invading vessels. Long ago, a small base was built on one of its moons to support patrol operations and over time this was developed into a major fleet base. Today, Allathurion Base is the home port of the Confederation's Sacnoth Fleet. It has its own protective flotilla, which is also charged with denying the gas giant to invaders and can call upon reinforcements from the system defence fleet if necessary.

Allathurion Base has extensive military repair and construction yards, where many of the Confederation's capital ships are built. There are extensive research and development facilities at the base and occasionally these produce a prototype for testing or receive a vessel obtained by shadowy means, to be reverse-engineered. The R&D works at Allathurion are among the most secure facilities in the whole Confederation.

Outsystem Holdings

In addition to the bases at Allathurion and Welleran, Sacnoth has cities on planets and moons throughout the system. These were all built with a specific purpose in mind – usually mining – and developed with the same carefully planned investment as Sacnoth itself. Whilst none of these sites is particularly important, collectively, they add a lot to the system's economy and some provide specialist components to the fleet bases.

Many of the commercial ships that use the mainworld's orbital port were built in the Sacnoth system, as were the ore barges and in-system freighters that ply between outsystem settlements. Jump-capable ships are used for some runs but the vast majority of traffic coasts through normal space in a complex ballet of transfer orbits and gravitational slingshot manoeuvres. Whilst slower, for the most part, than jumping directly to a settlement, this

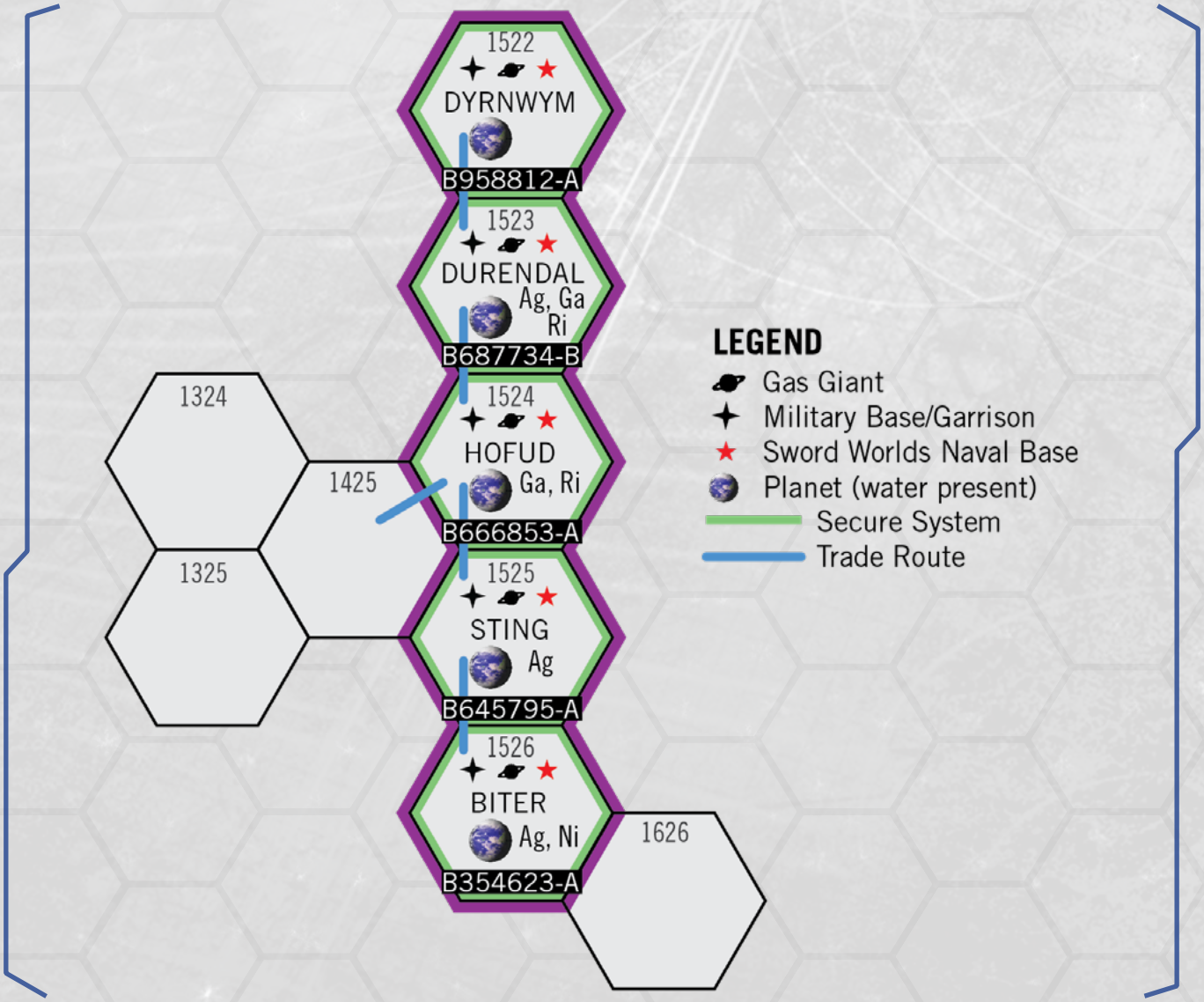
system allows the use of cheaper and more cost-efficient transportation for non-urgent cargoes such as ingots of ore or tanks of chemicals skimmed from the atmosphere of Allathurion.

Overall, the Sacnoth system is very busy, with commercial traffic, supply ships and naval vessels in constant motion between many moons and planets.

Cargoes headed out of the system are almost exclusively marshalled at the mainworld's highport. Typically, goods are bought by portside brokers before they arrive or during unloading and rearranged into consignments for local industry or sale either at the highport or in neighbouring systems. The highport is thus the hub of all this dispersed commercial activity.

THE TRAILING WORLDS

The Trailing Worlds are generally considered to run from Dyrnwyn to Biter, although many (mostly in the Trailing Worlds region) contend that it is not an astropolitical grouping at all. Hofud, Sting and Biter are often considered independently or as part of other groupings. Certainly the 'Trailing Worlds run' exists as a trade route but the worlds on it would tend to deny they are part of a local political grouping.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Dyrnwyn	1522	Naval, military	B958812-A	—	—	G
Durendal	1523	Naval, military	B687734-B	Ag, Ga, Ri	—	G
Hofud	1524	Naval, military	B666853-A	Ga, Ri	—	G
Sting	1525	Naval, military	B645795-A	Ag	—	G
Biter	1526	Naval, military	B354623-A	Ag, Ni	—	G

DYRNWYN

Dyrnwyn is named for a magical sword in Welsh mythology. When drawn by an unworthy man it would burn him with magical fire. Someone who was of noble worth could wield it unharmed whilst its flames were turned against his enemies. The name-sword has little significance to the people of the world Dyrnwyn, which orbits a K4 (orange) star named Rhydderch after its legendary wielder. The star has an M8 (red) companion, but databases vary on its official designation. The system contains a gas giant and five terrestrial planets.

Dyrnwyn has a thin atmosphere and about 80% surface water coverage. It is tidally locked, with most of its oceans covered in thick ice; only in the equatorial region of the 'bright' face are oceans liquid. Since most of the world's land is distant from this area, the continents are a frozen wasteland, with the Jarthlaug islands being the most habitable part of the world.

Society

Most of Dyrnwyn's 200 million inhabitants live in enclosed cities on the major continents, constructed wherever land is high enough or ocean currents enough warmth to keep the area relatively ice-free. Power has never been much of a problem due to tidal locking; cold winds blow constantly from the dark side and power vast wind farms and there are floating solar electricity generation plants in thawed areas of the ocean. Ice can be kept at bay by artificial heating where necessary but it is more cost-effective to take advantage of local conditions.

Cost-effectiveness is essential to the world's corporate government, which grew out of commercial interests that first funded colonisation. Today, the Fortarn Conglomerate owns Dyrnwyn and governs it as a commercial asset. Infrastructure is built if there is a suitable projected return; services are provided to those who can pay for them.

There is a strong sense of community among the poorer classes of society, who receive few governmental services. Health care, especially for those too sick or old to work, is based entirely on volunteers or community projects to fund a clinic. The situation is generally seen as acceptable, largely because the average poor Dyrnwyner is perversely proud that they give nothing to the government – they are not taxed to pay for services they do not use – and get nothing back. What they have is their own.

Better-off citizens have a similar attitude. Hard work and entrepreneurial spirit will get a citizen what they want, it is said, and being able to pay for a good standard of living is the reward for putting in the effort. This creates deeper social divides than are seen elsewhere but has not led to significant unrest. The Conglomerate has all the money and all the power, so prosperity means being a good citizen and doing what the Conglomerate wants.

Dyrnwyn Starport

Dyrnwyn's orbital port is Class B as it has no starship yards but it is very extensive to support traffic on the Trailing Worlds Run and jump-2 traffic into the Imperium. A considerable amount of trade comes in by way of Arba from Lanth and Lunion and the Fortarn Conglomerate maintains a trade fleet to service these routes along with supporting infrastructure. Lanth Dock and Lunion Dock are surrounded by some of the most prestigious businesses and entertainment venues in the system and between them lies Dyrnwyn's foremost opera house.

Military and Naval

Dyrnwyn's military is run on corporate lines, with cost-effective units equipped in an efficient manner that minimises logistical burden. Orbital space is guarded by a network of forts and smaller defence platforms, backed up by a powerful force of in-system monitors and gunboats. Dyrnwyn also has a modest force of cruisers and capital ships but does not maintain second-class battleships. This is considered by many to be a statement on the part of the government – Dyrnwyn will defend itself or project power against enemies but has no mobile defensive assets to protect its neighbours, an attitude is entirely in keeping with the philosophy of the Conglomerate.

Outsystem Holdings

Dyrnwyn maintains a considerably offworld presence in its home system, with mining and extraction sites on most large bodies. Moves are afoot to establish a presence in other systems, although at present this seems to be limited to outsystem mining vessels and a small amount of infrastructure to support them.

DURENDAL

Durendal is named for the sword of Roland, one of the 12 Paladins heroically killed in the Song of Roland, an ancient Terran legend. The average citizen is very proud of the connection to their world's name-sword and a whole post-modern mythology has sprung up around the idea of items or people that symbolise perfection in the way Roland and the other 'perfect knights' were the embodiment of their ideals. A pilot will try to make this landing the perfect one; a merchant will seek the perfect deal. Of course, ideas about what is or is not perfect varies and there is a lot of debate about exactly who played the perfect innings or which beer perfectly embodies the ideal of beer-ness.

Durendal orbits an M1 (red) star named Roland as part of a system containing four gas giants, a planetoid belt and five terrestrial planets, in addition to Durendal itself. The world is tidally locked to its primary, although this has not always been the case. It is now known that Durendal was terraformed around 300,000 years ago, presumably by the Ancients and there are indications that an attempt was made to break the tidal lock. A grid of extremely dense material has been detected deep in the world's crust. Its exact composition is unknown, and it seems to be inert, but this grid is presumed to be connected with a brief (in astrophysical terms) period in which Durendal broke from its tidal lock and began to rotate in a manner better suited to the creation of an Earth-like world.

Durendal has a dense atmosphere and about 70% water coverage. During the period the world was not tidally locked it suffered from immense tides as a result of proximity to the star, causing great damage. Stresses on the planetary crust resulted in chains of volcanoes spewing vast quantities of lava onto the surface, with ash clouds causing serious damage to the ecosphere. This activity subsided as Durendal settled back into its tidal lock but volcanism remains higher than on similar worlds.

Society

Despite the tidal lock, Durendal is a very Earth-like world, well suited to the homesteader lifestyle idealised by many Sword Worlders. The soil is rich due to large quantities of volcanic ash, allowing farmers to harvest large crops for relatively little effort. Of course, given the near-obsession with perfection on Durendal, every farmer has a system they are convinced is a little better than their neighbour's and competition to be the most productive is fierce.

Governance is feudal in nature, with free landowners owing allegiance to a jarl and the jarls ruled over by a monarch who uses the title hertug. At times this position has been hereditary, on other occasions the jarls have elected one of their number to the throne. There have, of course, been armed clashes to determine the succession of the next hertug.

Relationships between the jarls and the carls (non-noble landowners) can vary considerably. Most jarls are aware that they have a duty to lead and set a good (ideally, perfect) example of fairness and good land management, and are accepted as worthy leaders by followers who give loyalty. There are some who neglect or exploit their position and unfortunately some have done well enough to expand their power. There are those who believe a civil war is brewing on Durendal. It may be that the only way to avoid the overthrow of the existing social system will be for the 'worthy jarls' to take up arms against their less high-minded brethren.

Durendal Starport

Durendal has a modest Class B starport geared mainly to bulk agricultural exports and support of the Trailing Worlds Run. A steady stream of commercial traffic enters and leaves the port, although relatively little other than Durendal's own exports are traded there. As a result, the port has few brokers; those seeking cargo tend to move on to Dyrnwyn. The port brings in reasonable revenue from passing ships but its economy is based upon service, maintenance and recreation for crews rather than trade.

Military and Naval

Durendal's population of around 70 million has always produced a greater number of military recruits per capita than most other worlds. Durendal is one of the foremost suppliers of light infantry formations to the Confederation, both as contributed units in wartime and recruits to the standing army. It is also a solid recruiting ground for the Patrol.

The world's standing army is extremely small, at least on paper. Only a handful of battalions are permanently embodied but numerous reserve formations exist that can be quickly filled out at need. Equipment for these units is in ready storage and additional stocks of weapons are held to equip lower-readiness reserve forces. Not coincidentally, this system reduces the amount of heavy weaponry available outside the Royal Arsenals.

These world-military units are backed up by private forces of the jarls and the king, plus local militia and jaeger units. These are lightly equipped but skilled with their weapons and many members have served in the military or the Patrol and could be reformed into regular soldiers in a short time.

Naval forces are also small, consisting mainly of defensive ships without jump capability. Durendal does have a force capable of projecting power, based around a battlecruiser named for its homeworld but its contribution to the Confederation Navy tends to be in terms of money rather than ships.

Outsystem Holdings

Durendal owns numerous installations and has a few small cities on other bodies in the system. A significant proportion of the workers and inhabitants of these installations are from elsewhere in the Confederation, although the companies that employ them are owned on Durendal. An extensive web of in-system transport vessels connects these installations to the central starport.

HOFUD

Hofud is named for the sword of the Norse god Heimdall, guardian of the Bifrost bridge into Asgard. The name-sword is not especially significant on Hofud, although occasionally a political figure will create a convoluted image of the Metal Worlds as a bridge from Imperial space into the Sword Worlds and try to represent Hofud as a defender of it.

Hofud orbits Heimdall, a G6 (yellow) star with an M9 (red) companion. It has a dust ring containing several bodies that might or might not qualify as moons and 11 definite – if small – moonlets. This is unusual for a non-gas giant and has provoked interest from the scientific community; astrogators have a variety of unkind names for Hofud's moon system. There are six other terrestrial planets, plus one gas giant in the system.

The planet itself is Earth-like, with a standard atmosphere and plenty of water. Unsurprisingly, the first colony established there flourished, allowing Hofud to become a major power in the early history of the Sword Worlds. With a population of 600 million and a solid industrial base, Hofud remains a major player both economically and politically, and is considered a primary target for the Imperium in the event of a new war.

Society

The majority of the population, around 560 million, live on Ofrein, the larger of the world's two continents. The smaller, Baaten, is much more sparsely populated and of little economic significance for the most part. The political system is familiar to most Sword Worlders; free people are called carls and ruled over by a mostly-hereditary noble class of jarls. Hofud has a titular monarch, elected from among the jarls upon the death or retirement of the previous hertug but the post is mainly ceremonial. Power rests with the most senior jarls, who command the loyalty of others who are theoretically their social equals but in practice have become subordinate.



The term thrall, traditionally used for serfs or slaves, is sometimes applied to non-landowning freemen by those who have their own business, land or property. It has highly insulting connotations and is casually thrown around by those who want to start a fight. Indeed, the term is so commonly used that many offworlders think it acceptable to refer to employees of any business as thralls. The results are predicable.

Hofud Starport

Hofud's downport is located at the entrance of an almost completely enclosed body of water named Ovelhay. The capital, Bomann and several major cities are around the coasts of Ovelhay and most bulk goods are shipped by sea. The highport is of conventional design, recently refurbished and quite impressive. Like many other Sword Worlds ports it is heavily fortified and has a large security squadron but is not used as a naval base.

Military and Naval

Hofud's military is a mix of regular Army of Hofud units equipped to Confederation Army standards and capable of slotting into higher formations without difficulty and forces raised by the jarls. These tend to be more lightly equipped but generally follow the same practices as the regulars. The navy, on the other hand, is entirely controlled by the world government using ships built with tax money. Some of the more powerful jarls have their own warships but these are private vessels unlikely to be involved in naval actions.

The navy is based out of a fortress orbiting the system's only gas giant. In addition to a heavy system defence fleet, the Hofud navy includes large numbers of low-jump vessels including second-class battleships and patrol vessels. This component of the force is optimised for protecting worlds facing Imperial holdings in Lunion and perhaps exerting control over the Metal Worlds if annexing one or more of them becomes desirable. A smaller contingent of the force is equipped for offensive or mobile reserve operations and would probably be offered to the Confederation in the event of a major war.

Outsystem Holdings

Extensive mining operations are conducted throughout the system with some industrial sites here and there, mostly specialist facilities making use of locally available resources or supporting industries for the mines and in-system shipping that transports their produce. A major munitions works is being built on one of the gas giant moons, capable of supporting the Hofud navy and exporting ammunition to other worlds. It is owned and run as a civilian business by the world government but has a naval security force.

STING

Sting is named for a magical sword in the works of JRR Tolkien, a connection that has very little significance to the people of the world. Sting orbits an M0 (red) star named Bilbo after Sting's bearer, along with two gas giants and six terrestrial planets. The world's thin atmosphere is officially listed as being tainted but the taint consists of heavy gases and exists only at low altitudes. There is a zone of air capable of supporting humans who have acclimatised between the tainted layers and regions where the air too thin. However, turbulence can move the boundaries of the safe zone considerably, and descent into low-lying areas is always hazardous.

Sting is tidally locked and its internal geological processes have run down over time. As a result, continental drift has halted and there is no new land formation. The existing land is almost all concentrated in a supercontinent gradually being ground down by erosion. Swamps and damp lowlands are the norm in the twilight region, with dense rainforest in some areas.

Society

Most of the world's 70 million inhabitants live in two large underground cities at the poles, with settlements scattered across the rest of the globe. There is little planetside infrastructure; the cities are connected by craft using low-orbital or ballistic flight and outlying settlements use either large grav transports or shuttles from the highport, or rely on long distance surface rail networks.

Sting was conquered during the Hofud Wars but ultimately became a possession of Dyrnwyn. By the time of the Second Dominate, Sting was a distant and largely forgotten possession; so long as its Ruling Authority handed over tax revenue on time, it was ignored. As the political wind changed elsewhere, the Ruling Authority carried on. Today it is the long-established government of an independent Sting.

The main cities are well planned and regulated, and as comfortable as any good quality orbital port. Indeed, many find them to have the same bland, comfortable functionality and lack of character as a typical corporate spaceport. The government is very similar in character; a functional and efficient bureaucratic apparatus that provides good services and has little corruption. Whilst this is conducive to comfortable lives and the chance to better themselves by various means, it does mean that the average citizen of Sting is less driven than other Sword Worlders and more inclined to take the quiet-life option.

There is another population on Sting, quite separate to the city dwellers. Known as Myrfolk, they are the descendants of those who left the cities during Sting's period of dominion by first Hofud then Dyrnwyn. The Myrfolk live in enclaves among the jungles of the twilight zone, struggling constantly to survive by a combination of gathering and basic agriculture. They are a tough people with a sophisticated culture, who lack much in the way of technology above basic metalworking. Offworlders seeking treasure or knowledge in ruins abandoned during the wars of dominion sometimes hire the Myrfolk as guides. Otherwise, they have little contact with outsiders.

Sting Starport

Sting's downport is located at the north pole. It is subject to considerable wind shear due to air movement from the cold to the warm side of the planet, making surface landings tricky. Most ship operators prefer to dock at the highport and use shuttles piloted by experienced local personnel for transit planetside. The highport itself is unremarkable, with the same lack of character as Sting's cities.

Military and Naval

Sting's land forces are small and optimised for operations within or close to the major cities. A handful of 'pride' battalions are maintained to allow participation in Confederation military actions but for the most part Sting does not need much in the way of land forces. It does have extensive fortifications around the cities, sheltering aerospace defence installations.

The navy of Sting is unusual in that it contains a high proportion of tenders and carriers. These are designed to accommodate standard Confederation designs of small craft, gunboats and larger non-jump-capable warships. At any given time, some of these ships are on patrol in Sting's outsystem, using their brood of gunboats to sweep a wide area for intruders.

Outsystem Holdings

Sting's government has invested heavily in outsystem mining and industry, although many installations are run by contractors or companies based on other worlds. The result is a very busy system with transports moving constantly between production, industrial and economic centres of the system.

BITER

Biter is named for a sword in the works of JRR Tolkien and also known as Orcrist. Little significance is attached to the association. Biter orbits a G7 (yellow) star named Thorin after the bearer of Biter, which causes some confusion since Orcrist also orbits a star of that name. Thorin has an M1 (red) companion named Gondolin. There are six other terrestrial planets and a gas giant in the system.

Biter was terraformed by the Ancients but is too small to permanently retain its thin atmosphere, which in turn means it will lose its water. At present, Biter has about 40% surface water coverage but it is shallow, surrounded by mineral flats created by evaporation. The air in these low-lying areas is thicker than elsewhere and it is probable that life will be possible in what used to be shallow coastal waters long after the air pressure on what is now land has dropped to unsafe levels. That day is very far in the future, however.

Although the continental interior is desert for the most part, the coastal regions are inhabited by an incredible variety of species. Scientists have identified creatures and plants from at least 43 different worlds, presumably imported by the Ancients. The ecosystem is still in flux, not least due to the changing conditions caused by oceanic evaporation.

Society

Biter was largely depopulated in the 400s after conquest by Hofud. Some of the population were deported to other worlds but the majority were killed. Chemical defoliation accelerated the desertification of many areas and thoroughly poisoned centres of food production. Recovery took several centuries and the population has only recently reached the millions mark.

As a result, Biter has little economic significance. Its population are dispersed, often dwelling in small communities in the heart of former cities. Their surroundings are unusual, with plant and animal life reclaiming old structures to create a new landscape. These settlements are for the most part self-sufficient for food and have enough industry to make the most of what they need but cannot contribute to a world economy in any meaningful manner. Farmsteads and ranches are scattered across habitable lands, with around 200,000 people living in the only major city.

Society is peaceable and democratic, with most decisions reached by local consensus and passed to higher government if necessary. There is not much of a central government, just a basic apparatus to handle offworld diplomacy and matters of concern to more than one community. Those elected to take part in governance journey to the capital, Ifingholm, where they serve until they want to come home or are asked to leave. Some visitors find it hard to believe Biter has a

government at all; everyone just gets on with their own business and tries to figure out a collective solution to local problems.

Biter Starport

Biter's starport is small but well run. Unusually, both highport and downport are operated by outside contractors, who pay a proportion of revenue into Biter's coffers. The port is the only major source of income for the government, which by its nature does not need much money. As a result, there is a respectable surplus each year, occasionally used to fund projects around the capital and port. Some are useful and worthy, others the product of too much democratic input. Visitors wondering exactly what is being built or installed sometimes find that nobody really knows for sure who authorised what and why. The port has some fascinating follies as a result, such as the astronomical viewing dome built for scientific purposes but is now part of an expensive hotel.

There is a second small starport in the Biter system, orbiting one of the terrestrial planets. This is maintained by the Imperial Interstellar Scout Service and serves mainly to support x-boat operations between Adabicci and Caladbolg. As might be expected, its presence is contentious as it represents an Imperial foothold in Sword Worlds space. A modest lease fee and agreement that whilst IISS and Imperial Navy ships will use the port, all others must go through Biter's highport, has thus far kept the issue from becoming more of a problem.

The fact that the people of Biter are tolerant and easy-going compared to most other Sword Worlders, and the high proportion of offworld contractors operating the port, mean that many Imperial visitors get a misleading impression of the Sword Worlds as a welcoming place when they come through Biter. Those who proceed into the heart of Confederation space are often taken aback by the sudden change of attitude towards outsiders at worlds like Gram or Sacnoth.

Military & Naval

Biter maintains a sizable military force relative to its population but it is made up almost entirely of local volunteers loosely organised into regional defence associations. There are a few aerospace defence weapons around the capital along with troops to man and defend them but there is no power projection capability.

Biter's navy is very small and draws more than half its personnel from other worlds. It is little more than a patrol force for local security, although is augmented by ships assigned by the Confederation to defend and secure the region.

Outsystem Holdings

Biter has no outsystem holdings but its capital hosts the small administrative apparatus for the Metal Worlds. This is sometimes mistaken for the government of Biter as it is better organised and has almost as many personnel. There is also a naval base in orbit around the gas giant, although this is a joint possession of the Confederation Navy and Patrol rather than the government of Biter. Ships based out of the station conduct patrols through the Metal Worlds and, if necessary, carry out missions mandated by the Commissioner for the Metal Worlds. The government of Biter has very little input into these operations.

THE METAL WORLDS

NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Iron	1626	—	E529000-0	Ba	—	G
Bronze	1627	—	E201000-0	Ba, Ic, Va	—	—
Mithril	1628	—	E568000-0	Ba	—	G
Steel	1529	—	E655000-0	Ba, Ga	—	G

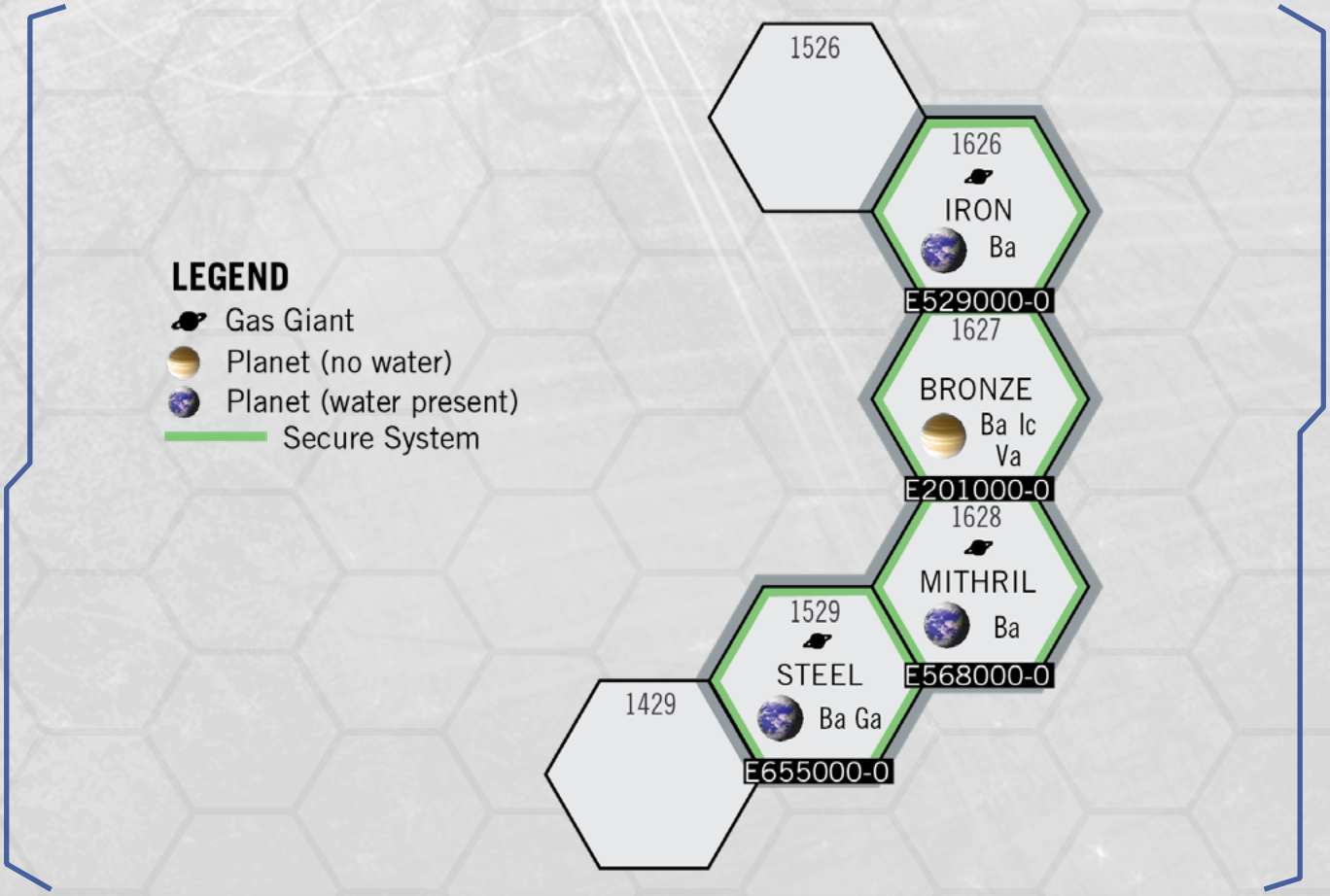
THE METAL WORLDS

The four Metal Worlds are 'reserve worlds' owned and administered by the Sword Worlds Confederation to be developed as and when the need arises. It is an unspoken but acknowledged truth that development is far more complex than that – questions of ownership and revenue are likely to derail any cooperative attempt at development and a single-world landgrab could develop into war.

Various grandiose ideas have been floated about creating a 'Wall of Iron and Steel' or a 'Bastion of Metals' against Imperial encroachment by fortifying the Metal Worlds. The cost involved, and the fact that an Imperial fleet could simply bypass fortified systems of no economic value, makes this project an unlikely one, although the idea is routinely brought up at long-term planning sessions. The need to maintain a credible territorial claim is more pressing and realistic; without a human presence the Metal Worlds might be construed as open for exploitation by outsiders. The Imperium does its best to keep its people out of the region, as it does not want accidental friction, but occasional interlopers have to be dislodged.

The Metal Worlds each have a small administrative team assigned, based on Biter, who report to the Commissioner for the Metal Worlds. He has no permanent military forces but can borrow assets from the Confederation Navy and the Patrol based out of the Biter system and request heavier forces if necessary. The Metal Worlds are, in wartime, expendable in the short term but control is seen as a strategic necessity by Confederation planners. So, the navy would not waste lives and ships to defend against a major attack but retaining control at the end of a war is seen as an important objective as the four systems would provide the Imperials with an easy route for expansion and eventual encirclement of the Confederation.

There are currently four Metal Worlds: Iron, Mithril, Bronze and Steel. The original claim included others that were annexed by the expanding Imperium. Gold became Olympia and Silver became Wardn, whilst the world designated Electrum was named Smoug by the Imperials. Particularly rabid politicians sometimes drag this up as an example of Imperial encroachment and ill-treatment of Sword Worlders but it occurred several centuries ago and most Swordies do not care about three planets that were never more than claimed – especially since the claim was made by Steel, which is no longer inhabited.



IRON

Iron orbits an F0 (yellow-white) star along with three other terrestrial planets, four gas giants and a planetoid belt. Its very thin atmosphere is tainted by toxic gases resulting from extensive volcanism, although this is gradually dissipating. Lack of much in the way of a protective atmosphere results in the oceans – which cover 90% of the surface – constantly evaporating. The result is an unpleasant 'warm, almost breathable steam bath' environment that has allowed simple life to develop.

Iron has a Sword Worlds outpost with a landing area, maintained primarily to support the territorial claim. It has no permanent population, just a handful of personnel from the Patrol, the Metal Worlds Administration and the Scientific Service conducting small scale research into a world of little value. Ships passing by typically skim fuel from the gas giants or conduct ocean refuelling. Very few land at the outpost.

BRONZE

Bronze orbits an M3 (red) star along with three other rocky planets and a planetoid belt. It has no atmosphere and is heavily cratered, although some water is available in the form of ice. Like Iron, Bronze has no permanent population but there is a modest sort-of-starport serving the largest of a handful of mining installations on the surface. These are generally located close to unusual concentrations of minerals thought to be the result of asteroid impacts and tend to be transient. A mining company will move in, operate for a year or two, then pull out and relocate elsewhere. Few attempts are made to keep track of these temporary facilities, although the Confederation will send a ship to run off non-Sword Worlder prospectors.

Bronze has a number of extremely deep cracks in its surface, probably due to tension as its crust cooled. Most are completely unexplored and naturally there are many wild tales of treasures and dangers to be found in the interior of Bronze.

MITHRIL

Mithril orbits an F4 (yellow-white) star along with a gas giant and six other terrestrial planets. It is located at the outer edge of the warm zone and as a result is very cold with most land covered in ice or deep snow, although its atmosphere is breathable without assistance. Temperatures in some areas are high enough to permit permanent vegetation, of a scrubby and tough sort that is little use to humans and creates a significant obstacle to land movement. Short-lived 'ephemeral glades' erupt whenever local conditions are warm enough and die almost as quickly when the temperature drops.

There is no permanent population, although a small outpost is maintained for the usual territorial claim purposes. It is said that signs of habitation by Aslan have been found in a remote location on Mithril (which could be almost anywhere; there are no non-remote places on this desolate world) but proof has yet to surface.

STEEL

Steel orbits a K8 (orange) star along with four gas giants, two planetoid belts and eight other terrestrial planets. With a thin atmosphere and about 50% water coverage, Steel was borderline habitable even before Ancient terraforming operations improved the environment. It was selected for development and colonised in –105, but the young colony was isolated during the wars that led to the Fimbulvetr. After struggling for decades, Steel began to develop as contact increased with the other Sword Worlds and by 256 its government was in a position to begin looking for new territories. Steel claimed several nearby worlds and set up outposts, which were summarily dislodged by forces from Sting.

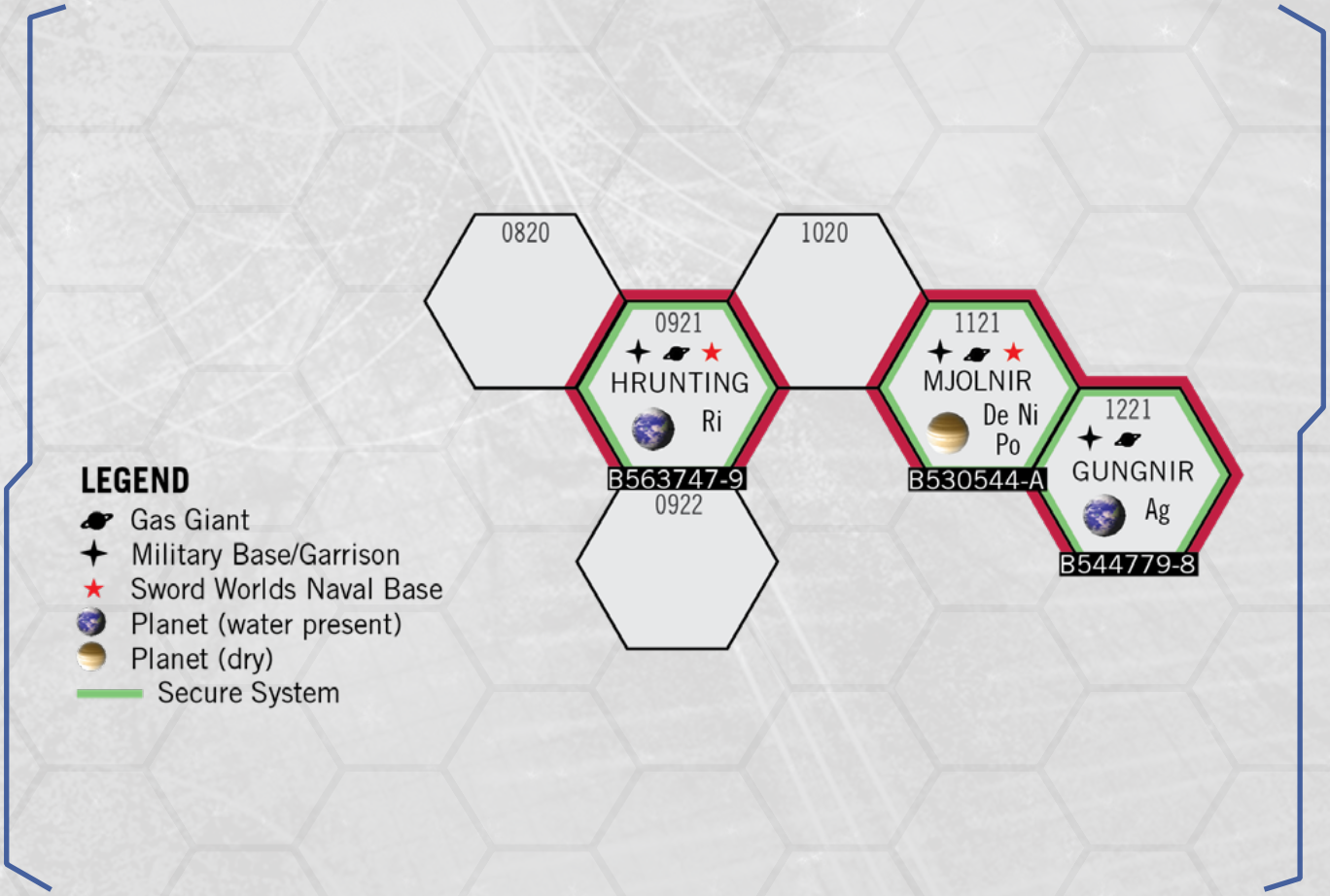
With a population in the low millions, Steel was a very minor player over the next decades but managed to get by until 579. At this time a cluster of asteroids was detected on a collision course with the world. Unable to find a way to survive the coming bombardment, the population was offered a chance at evacuation. Some went to Sting but most evacuees settled on Caladbolg. Despite a herculean effort, many were still on-planet when the impacts began, killing a quarter of the population immediately. The remainder largely perished in the aftermath, although some were picked up by ships that kept returning for years after the strikes.

Plans to resettle Steel came to nothing due to internal conflict among the Sword Worlds and with the rise of the Sword Worlds Confederation it became a reserve world. It is officially uninhabited, other than a territorial-claim outpost, although there are many stories of survivor communities in sheltered valleys or secret high-technology cities, where the descendants of those left behind after the evacuation still dwell.

THE GUNGNIR SPUR

The Gungnir Spur has always been a troubled region, even by the standards of the Sword Worlds. It is considered by many to contain Margesi despite the world not being part of the Confederation. However, the commonly accepted usage of the term covers Hrunting, Mjolnir and Gungnir. The spur faces Imperial territory to coreward and gives access to the Vilis subsector. This allows jump-2 access to the Zhodani Consulate and the region around Arden, although only by way of transit through Imperial space.

The Gungnir Spur has always been the heartland of Aesirism, with more believers per capita than other areas. The populace are, for the most part, more tolerant of non-believers or other religions than of 'cultural Aesirists' who pay lip service to their gods but do not believe in them. A true believer might swear by Odin as a solemn oath and does not like hearing their god's name used in casual conversation for minor emphasis. It is rare to find someone willing to do violence over this but unfortunately far too common to meet someone looking for trouble who will use it as a pretext.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Hruntig	0921	Naval, military	B563747-9	Ri	—	G
Mjolnir	1121	Naval, military	B530544-A	De, Ni, Po	—	G
Gungnir	1221	Military	B544779-8	Ag	—	G

HRUNTING

Hrunting is named for the sword used by Beowulf in the Old English poem about his deeds. The connection is not of great importance to most citizens, although the image of a monster-slayer is sometimes twisted into anti-Darrian propaganda in periods of tension. The monsters in this case tend to be imaginary Darrian superweapons.

Hrunting orbits an M2 (red) star named Beowulf along with a planetoid belt, three gas giants and five other terrestrial planets. It has a standard atmosphere and around 30% surface water coverage. The world is locked into a 3:2 resonance with its primary, resulting in a 44-standard-day light/dark cycle and is additionally subjected to frequent and sometimes quite violent solar flares. These have the effect of brightening daylight for a few hours and posing a radiation hazard to poorly shielded ships but are not a significant influence on life planetside. However, Beowulf is prone to enter 'superflare' cycles where intensity and frequency are both greatly increased. The cycle is estimated as lasting a century or more at intervals of 10–15,000 years. The last cycle occurred shortly before the first colonists landed on Gram.

One effect of these superflare cycles is to evaporate the oceans, leaving behind large regions of mineral flats. Most of the water returns to the surface and is evaporated again but Hrunting's low gravity means it is gradually losing its water. The interior of the world's supercontinent is extremely dry and along the coasts the soil has to be cleansed of its high chemical content before it can be used for agriculture. Maintaining a viable farming industry is challenging, as storms tend to blow chemical-rich dust into the farmlands.

Society

Hrunting's 30 million people dwell along the coasts, in settlements surrounded by cleaned farmlands. There are hundreds of small farming towns in rings around larger hubs, with a handful of small cities. Where possible these are connected by sea transport, although heavy grav vehicles are used to move goods overland. The result is that the region around each city, and to a lesser extent each large town, has its own slightly different set of cultural values.

Within these regions, there is strong peer pressure to conform to local social norms. Outsiders are given a certain amount of leeway, largely because they are, for the most part, ignored but those who stay around are expected to conform to local patterns of speech, dress and behaviour.

Given the traditional strength of the Aesirist church in the region, many visitors are surprised that relatively few settlements have overt symbols or religious buildings. This is largely due to the all-or-nothing attitude of the population. A town that has embraced true Aesirism does so fully; one that has not may have a few adherents but the general conformity of society tends to side-line a belief system unless it becomes the norm in that town.

Governance is by elected representatives who hold a parliament in the capital. This creates a theoretical democracy, though voting on the selection of representatives is reserved for noble landowning classes.



The actual representatives do not need to own property or businesses but the vast majority do. As a result, Hrunting is run by its noble class, although this at least ensures those elected to parliament are properly prepared.

Hrunting Starport

Hrunting's highport is the gateway to the Gungnir Spur and the systems to coreward, to the Entropic Worlds and thereby to the Querion subsector and is a common turnaround point for ships plying the Gram Arm. It is a very large installation, built as three subordinate ports equidistant around the mainworld, with a primary structure orbiting at right angles to the three.

The subordinate ports receive incoming traffic from the Gram Arm, from coreward and from spinward respectively. Thus ships from Darrian space and the Entropic Worlds use the spinward terminal, those from the Gungnir Spur and Imperial space beyond are directed to the coreward terminal and the bulk of the port's traffic docks at the larger Gram terminal.

In-system traffic and shuttles from the surface use the main port, as do naval vessels and ships from 'preferred operators'. The subordinate terminals all have a flotilla of fighters and patrol vessels for local security, whilst the primary terminal functions as a base for the system defence fleet.

Military and Naval

Hrunting's ground forces are large for its population and relatively small industrial base and for the most part well equipped. More emphasis is placed on ground-based aerospace installations operated by the army than on orbital forts, so many of the army's units are specialists or security formations tied to an installation. The remainder are mainly wheeled-mobile units or light infantry battalions trained to form part of a mechanised battlegroup.

Hrunting considers itself the first major target in a war with the Darrians or Imperial forces from Vilis. Whilst this might be more self-importance than strategic insight, preparations have been made. The system defence force is strong and has bases at the highport and in orbit around all three gas giants. It is designed to fight hard, then disperse to continue the struggle with harassing raids if victory is not immediate. Hrunting has a small jump-capable navy that operates no vessels larger than a light cruiser.

Outsystem Holdings

Hrunting has only a few outposts in the system, plus its system defence bases. Plans to exploit the outsystem's minerals and metals are occasionally tabled but rarely get past the feasibility-study stage.

MJOLNIR

Mjolnir was originally named Hauteclere after the sword borne by Oliver, a character in the Song of Roland. It was renamed Mjolnir (Thor's magical hammer) during the Aesir Alliance, although the association has very little significance to the average citizen. Mjolnir orbits a super-earth planet named Niflheim, in a system containing an A5 (white) star named Oliver, which has a G0 (yellow) companion. There are two gas giants, two planetoid belts and seven other terrestrial planets in the system.

Little is known for sure about Niflheim, despite its proximity to Mjolnir. Its surface gravity is estimated at 1.69g, with a very dense oxygen-nitrogen atmosphere. Niflheim should be habitable, despite its high gravity, but it possesses an extremely vigorous biosphere that attacks any foreign object arriving at the surface or even entering atmosphere. It is theorised that the problem is microscopic plants or creatures with a voracious appetite for materials not available on Niflheim – probably because they are all consumed by the creatures. An alternative theory suggests the cause is a terraforming mechanism created by the Ancients or perhaps the Darrians, which has gone berserk and become self-sustaining. All that is known for sure is that Niflheim's biosphere can defeat any protection and that robotic vehicles are as susceptible as human explorers.

Niflheim is blanketed in thick clouds most of the time, making observation difficult. Claims have been made that pseudo-fungal forests have been spotted, with what might be animals moving among them. These are postulated to be conglomerate biological constructs made of the same micro-organisms that ate the probes sent to investigate them but there is no solid proof. It is not clear what would happen if these organisms were transplanted from Niflheim and nobody is in a hurry to find out. Orbital missile platforms are in place to warn incoming ships and shoot down anything that enters atmosphere and attempts to return to space. As far as science is aware, nothing has gone to Niflheim and survived, and nothing has been allowed to leave its atmosphere.

Mjolnir is less inviting than Niflheim. It is a small rockball with a very thin atmosphere, kept supplied with oxygen by the world's micro bacterial life. The world is regularly pounded by meteorites displaced from the planetoid belts, making it a hazardous place to live and ensuring its surface remains loose regolith rather than conventional soil. Mjolnir does, however, have a useful resource; its unusual surface composition results in deposits of a silicone-rich sludge comprising rock dust and remains of microorganisms. Referred to as 'oil',

this is not a petrochemical substance but highly useful in a variety of industries. Since an economic extraction process was developed in the 400s, Mjolnir has had a viable export and for several centuries expanded its population base.

In 1044, the 'Great Earthquake' struck the region around Mjolnir's single large city, causing a catastrophic failure of its life support capability. Almost the entire population perished in less than an hour and the effects on the rest of the population were profound. Almost all services, including power generation, were located in the capital and fed to outlying settlements through a web of transit routes cut through stable areas of bedrock.

Society

Mjolnir was changed enormously by the Great Earthquake. The previous centralised and rather oppressive government was destroyed and has been replaced by a decentralised and democratic system, with each town and settlement essentially self-sufficient. The capital remains largely undisturbed, although salvage operations have been undertaken to retrieve valuable equipment. The economy is still based on the extraction and exportation of silicon-based 'oil' but the process is on a much smaller scale.

A large segment of the population works in the extraction business but operations are now carried out by a handful of workers or even a single person working a small oil pool. Some pools produce more valuable oil than others and there are occasional conflicts over extraction rights but by and large the population are cooperative and inclined to help one another rather than fight.

Mjolnir Starport

Mjolnir's starport was developed to meet the needs of a large oil extraction and export business and receives too little revenue to be properly maintained. The problem was dealt with in a decisive manner, by conducting salvage operations on the facility before it became too dilapidated. Parts of the orbital station were cut away, either for use elsewhere or to be scrapped. Some of the equipment from these sections was placed in storage to replace what is currently in service, the rest was sold. The result is a much smaller station built out of the old highport, with a few empty segments here and there. What remains can be kept serviceable with the stored equipment and revenue coming in, allowing the port to keep its service level high.

The downport is mainly underground, cut into the rock surrounding an extinct volcano. This represents one of the most stable areas of the planetary crust, allowing a modest underground city to grow up around the new port. The remains of the old one, located at the destroyed capital, yielded a little salvageable equipment and more was brought down from the orbital component when it was downsized. The port is set up more for tanks of oil than people or bulk goods but offers a respectable level of service for those with a reason to venture down to Mjolnir's surface.

Military and Naval

Mjolnir maintains one combat ready battalion, usually on secondment to the Confederation Army, even in peacetime and two reserve battalions that could be quickly brought up to strength. The remainder of its forces are made up of local militia units of varying quality.

Mjolnir has a handful of patrol craft and some utility vessels that service the oratorial forts over Niflheim, paid for by a subsidy from the Confederation. Other than this, there are no naval forces belonging to Mjolnir.

Outsystem Holdings

Mjolnir acts as a base for patrols around Niflheim but has no outsystem holdings of any significance.

GUNGNIR

Gungnir was originally named Morglay, after the sword of Sir Bevis, who appears in Anglo-Saxon legend and the tales of King Arthur. It was renamed Gungnir after Odin's spear during the era of the Aesir Alliance. Gungnir orbits a G3 (yellow) subgiant star with an M4 (red) companion as part of a system containing two gas giants, three planetoid belts and seven other worlds.

Gungnir has a thin, tainted atmosphere and around 40% water coverage. This is mostly contained in two large bodies separated by the central supercontinent. For much of its existence Gungnir was ice-bound, with only primitive life. This developed separately around the two oceans, resulting in Gungnir having essentially two entirely different and incompatible biospheres. As its primary began to expand into a subgiant, Gungnir became warmer and life spread out. Once they met, conflict began.

Neither ecosphere won the fight for Gungnir. Species evolved in ways that made them toxic to the other biosphere, until balance was achieved. Today, species from both biospheres are mixed on Gungnir, competing directly and indirectly for the same resources. One set of plants causes allergic reactions in animals that feed on the other, sometimes gaining supremacy in a region when the opposing plant in the same environmental

niche is eliminated by creatures feeding upon it. In other areas the ability to grow faster and spread more widely will suffice to create dominance.

Where one biosphere's plant life becomes dominant, its animals also thrive. This balance was disrupted by the arrival of humans, who quickly learned they too were allergic to one biosphere. Since then efforts have been made to clear these plants from inhabited areas and there the balance has swung firmly in the direction of life compatible with humans. The remainder of the planet, around 80%, still contains a mix of species. Many of these cause severe allergic reactions if touched or their spores or pollen are inhaled. Others are less virulent but the wilderness of Gungnir is a biological minefield. Away from carefully tended inhabited regions it is the norm to use filter masks and travel in sealed vehicles.

Gungnir has a number of extremely tall mountains, of which the highest peak is 24,891 metres tall. This places the highest peaks well above the breathable air in an already thin atmosphere. It is not hard to get to the top with a grav belt or vehicle but no expedition has ever managed to climb to the top of any of Gungnir's 'High Sixteen' peaks. Expeditions try from time-to-time and reaching certain landmarks on the shoulders of the High Sixteen can be considered an impressive achievement. No one has found a way to carry enough oxygen for the full climb, however.

Society

Gungnir is balkanised, with many different governments. Most are a variation on the theme of a noble class and common folk, although whether this manifests as feudalism, representative democracy or dictatorship depends on local conditions. This dates from the early settlement of the world, when enclaves were cut off from one another by a wilderness containing many poisonous species. Each went its own way and whilst cooperation is not uncommon, there is often too much wilderness between states to create a lasting joint enterprise.

Conflict between states is also made difficult by the surrounding terrain and in many cases there is no need to fight. However, competition for resources or continuation of old feuds means that at any given time there is usually a war going on somewhere on Gungnir. Most are desultory affairs consisting of skirmishing over 'strategic' landmarks that signify victory but have little real worth or raids by air and grav forces. Few major changes to the political landscape are made this way, although some states have gone into decline after spending too much to win a war that was worth too little.

Gungnir Starport

Gungnir's orbital port is the smallest Class B starport in the Confederation and probably beyond. Quality of service is high but the port receives much less traffic than those located on a through-route. Most ships heading into the port are jump-2 vessels from the Gram Arm, although there is some traffic along the Gungnir Spur. Traders headed for Lanth or Vilis often stage out of Gungnir, especially those unwilling to go through Dyrnwyn. One result of this is occasional booms in the local economy as a trade ship returns from a voyage in Imperial space and starts selling off its cargo. However, since Gram is only one jump away, most of these ships pass through without engaging in much trade.

Military and Naval

The various states of Gungnir have their own military forces, which are typically small and lacking in expensive equipment. Wheeled combat vehicles are common; grav platforms less so. Some states are able to contribute to the Confederation army but the majority could raise only a few light infantry formations if required.

Likewise, most states have no naval capability, although some of the larger ones contribute a gunboat or two, or fighters, to a joint defence force based out of the starport. Like the Confederation in microcosm, this force is wracked with internal politics and prone to disputes that take elements of it out of commission. The Confederation Navy normally maintains standing patrols in the Gungnir system to keep the peace and deter aggression but if these are called away the world is essentially defenceless.

Outsystem Holdings

The Gungnir system has plenty of real estate but little is exploited by local powers. Some mining is undertaken by corporations out of Gram and Dyrnwyn and occasionally by unlicensed operators from elsewhere. In theory, a portion of funds from the mining of resources in Gungnir's outsystem is to be divided between Gungnir's states but inability to agree on a fair division is used by some corporations to withhold payments 'until the dispute is resolved'. The unlicensed operators do not even pay lip service to this requirement.

THE ENTROPIC WORLDS

The Entropic Worlds have never been part of the Sword Worlds Confederation heartland but have been possessions at times. Their loss to the Darrians in 788 was a blow to Sword Worlder pride and many Case Darrian scenarios revolve around an attempt to retake them in a future time of tension. This was achieved in 1084 with the recapture of Winston, Entrope and Anselhome. None of these worlds is of great economic or strategic importance, however, and the desire to own them is more a matter of pride than necessity.

The Entropic Worlds are an astrographical extension to the Gram Arm and offer a safe route into the Querion subsector. If control can be secured, this region might see heavy investment to increase the value of trade routes running through and out of it but it is widely recognised that although Darrians do not think like Sword Worlders, they will surely have their own 'Case Entrope' plans. Until the region is firmly under the control of the Sword Worlds, any investment will be a huge risk.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Winston	0620	—	E887573-6	Ag, Ni, Ga	—	G
Entrope	0720	—	E436AAA-B	Hi	A	—
Anselhome	0820	—	C310588-8	Ni	—	G
Torment	0721	—	X433268-6	Lo, Po	R	—

WINSTON

Winston orbits a K5 (orange) star that has an M9 (red) companion. The system contains a gas giant and four other terrestrial planets. Winston itself has about 70% water coverage and a dense atmosphere, and would be an excellent candidate for development into a perfect home for rugged farmsteaders and small town Swordies. Its position at the tip of one arm of the Spinward Main makes it a logical turnaround point for trade ships that would reward investment in the starport many times over.

At present, however, Winston's 500,000 or so inhabitants are scattered in multiple small states. Attempts to impose a central government have not succeeded and initiatives to rebuild the starport have also come to nothing. The highport, crippled during the fighting for Winston in 1084, remains in orbit but requires major salvage work before it can be returned to service. The downport was likewise devastated by bitter fighting. There is little resistance to the Sword Worlds security force deployed to Winston, although most local settlements are very Darrian in outlook and refer to it as the 'illegal occupation force'.

Settlers are trickling into Winston from the Confederation and taking whatever land they can get. A more coherent strategy might produce a modestly sized city of Sword Worlders with a port but that would require investment that is not available. Instead, the colonists simply arrive and set up a basic community. Some have no idea how to be the self-reliant yeoman farmers they wish to become and get themselves into trouble. Ironically, they are more likely to be taken in by existing 'Darrian' communities than helped out by the Confederation. The influx of settlers is low at present but if it is not regulated or a plan implemented, sooner or later Winston will be the site of a range war over small scraps of territory.

ENTROPE

Entrope orbits a G6 (yellow) star with an M1 (red) companion. The system also contains eight other terrestrial planets and a planetoid belt. Entrope itself has a very thin atmosphere but plenty of surface water and can support a huge agricultural base that has permitted the population to exceed ten billion. This made Entrope difficult to control for both the Darrians and the Sword Worlds; neither fully conquered Entrope when they took it from one another and every war between the two states has been repeated by proxy on Entrope regardless of whether troops were committed.

The present situation remains unstable. The starport is in ruins and although the capital is tightly controlled by Sword Worlds forces other cities are contested by militia groups. In some cases these are pro-Sword Worlds groups willing to fight the Confederation's army in order to get to their 'real' enemies – the pro-Darrian militias.

The countryside shelters large numbers of rebels, insurgent, and well-armed opportunist criminal groups, further complicating the task of the occupying force.

The situation does not seem likely to improve and some commanders have expressed a preference for a new, clear-cut war against a Darrian or Imperial invasion. Peacekeeping and occupation are not to the taste of the average Sword Worlds solider, although to date the forces deployed on Entrope have acted with self-restraint and impressive fairness towards citizens of all origins. This is in keeping with the philosophy that 'today's enemy is tomorrow's citizen', although many would add 'someday… maybe' to that.

ANSELHOME

Anselhome orbits an M0 (red) main sequence star with an M1 (red) distant companion. The system contains one gas giant and five other terrestrial planets. Anselhome is astrographically significant as it provides a jump-1 link to spinward and has significant deposits of metals that are relatively easy to access due to deep cracks in the surface. These are also home to a variety of vacuum-dwelling life forms.

Anselhome has been a possession of the Sword Worlds and the Darrian Confederation, and has a mixed population who think of themselves first and foremost as Anselhomers. The rather bland bureaucratic government has weathered changes of ownership and little alters for the population other than the percentage of planetary revenue paid and to whom.

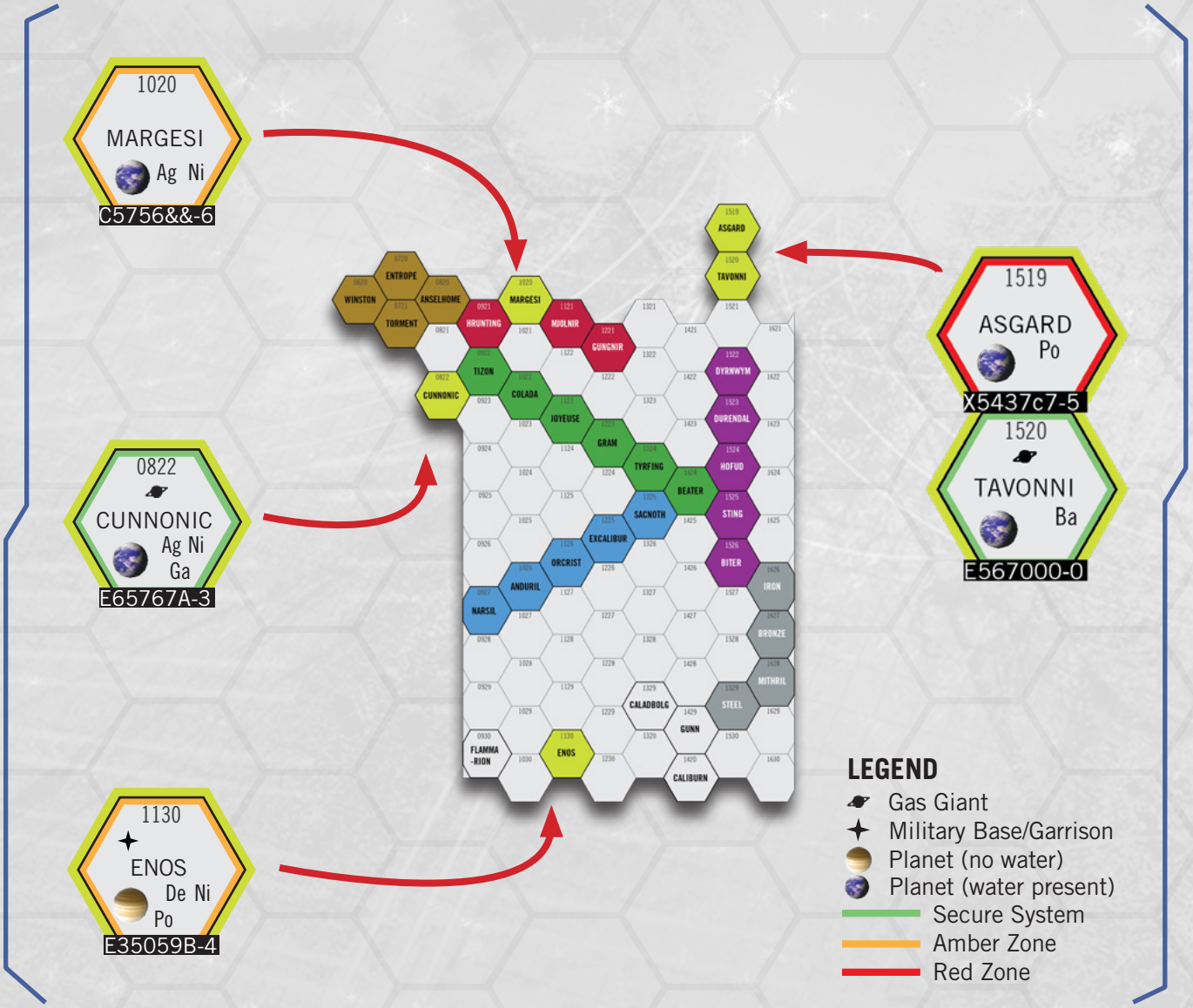
Most of the 600,000 or so inhabitants are employed in mining or supporting industries, selling on contract or to passing ships, depending on availability. There are several scientific expeditions on planet at any given time, poking around in the cracks to find new species or to try to understand those already discovered.

TORMENT

Torment orbits an M0 (red) star, along with two planetoid belts and nine other terrestrial worlds. Although it is the most habitable body in the system, this is relative to a collection of rockballs. Torment has been used by the Darrian Confederation as a prison planet for 'particularly-undesirables', as the saying goes, confined to a single settlement and required to pay for food and other necessities by mining minerals. How the convicts govern themselves is their own business and needless to say the situation is not pleasant. A few Sword Worlders have been sent to Torment – with the permission of the Darrian authorities – but for the most part the world is ignored by the Confederation other than being a component of the Entropic Worlds.

ASSOCIATED WORLDS

A number of worlds are associated with the Sword Worlds Confederation but not part of it or separated from the heartlands by a considerable gap. These are places the Confederation has a history with and which receive slightly more attention than other non-Confederation systems in the news or strategic planning.



NAME	LOCATION	BASES	PROFILE	TRADE CODES	TRAVEL CODE	GAS GIANT
Enos	1130	Military	E35059B-4	De, Ni, Po	—	—
Margesi	1020	—	C575677-6	Ag, Ni	A	—
Cunnonic	0822	—	E65767A-3	Ag, Ni, Ga	—	G
Asgard	1519	—	X5437C7-5	Po	R	—
Tavonni	1520	—	E567000-0	Ba	—	G



ENOS

Enos orbits an M1 (red) star named Kaleshi, along with a planetoid belt and collection of widely-spaced debris flung out of the belt at some point in the past. This includes six dwarf planets, which have settled into or will eventually settle into stable orbits. These are usually counted as 'planets' in astronavigation databases but are all disappointing rockballs, even Enos is rather small.

Enos was destined to be a much larger world, perhaps a super-earth, but suffered a massive impact that, in all probability, resulted in the planetoid belt. Lighter materials were blasted away, leaving the heavy metallic core covered by a thin rocky crust. In theory this might make Enos a very lucrative location for mining but there is still the problem of getting through several kilometres of crust.

Enos has no water but possesses a sea of sorts. Known as the Fire Sea, this is a region where natural petrochemicals and associated gases reach the surface. These can be extracted for industrial use but are sometimes ignited by static electricity in the atmosphere. When this happens to a pocket of gas, explosions can fling hot ricks and blazing tar into the sky, to the detriment of anyone nearby. Thick oils in the ground may also be ignited, resulting in patches of fire that give the region its name. The largest of these have been burning for decades.

Enos was colonised by accident and out of necessity in 477, when a shipload of refugees misjumped and had to land on the best world they could find. Seven years later they were located and offered rescue but most elected to make a go of their new home rather than hope for charity elsewhere. The large gap between Enos and the rest of the Sword Worlds ensured contact was minimal and it was the Imperium that ensured the development of Enos. As Imperial influence spread through the region, Enos became a useful stopover for ships headed towards the Five Sisters subsector.

Enos developed in near-isolation from the Sword Worlds for many years but eventually ships plying the District 268 trade route by way of the Metal Worlds began to stop at Enos more regularly. The colony had long since slid to very basic technology and there was little to trade but – apparently out of a sense of kinship and desire to prevent the world joining the Imperium – ships brought in mid-tech goods and sold them at very low prices to the folk of Enos.

This interest has provoked some comment, as all such trade with Enos is conducted at a loss due to its lack of useful exports. Sword Worlds naval ships have been seen regularly in the system, often without being spotted transiting via the Metal Worlds. This leads some to believe there may be a refuelling base in deep space between the Sacnoth Arm and Enos, and that Enos itself might be used as a staging point

for raids against Caladbolg and Flammarion. There are no facilities to support a naval force, however, which raises further questions.

Society
The only large population centre is a single city and some outlying installations at the south pole, the site of the original landing. Other settlements exist but are very isolated, with contact maintained by a fleet of imported TL6 aircraft and trade caravans that wend their slow way across the landscape. Water is a problem on Enos, so settlements tend to exist atop underground aquifers rather than in regions with good mineral resources. As a result most communities are made up of farmers and those who provide essential services such as metalworking.

Life is not easy on Enos but it does suit the Sword Worlder mindset. Indeed, there are many in the industrial cities of Gram who dream of buying a one-way ticket to Enos. Each small settlement has a hereditary ruler, forming a sort of noble class, with settlements linked to clans by ties of kinship or simple geography. Clans have their own rulers and are theoretically ruled over by the Hertug at the capital. In practice, control outside the main city is loose to non-existent and clans are more or less self-contained nations.

Enos Starport
Enos does not really have a starport but does have an airport at its capital with a few technicians who can help with starship-related tasks. Only a handful of ships come through, although there is a grand tradition of the 'recruiting boats' from the Confederation Navy, which arrive once a year to select hopefuls for training with the Confederation's armed forces. Recruiting Time is something of a festival, with naval and army personnel in town with money to spend and tales to tell. The rest of the time the port stands empty of starships but biplane transports come and go, connecting larger settlements to the capital.

Military and Naval
Enos has a small military force equipped to TL6 standards in the service of the Hertug and smaller forces loyal to clan and settlement leaders. Any clan could raise a reasonable number of riflemen as a militia. In addition, a selection and training facility belonging to the Sword Worlds Confederation is based at the capital, staffed by a few dozen instructors and selection officers, plus locals enrolled in the basic training programme. Most selected go to the army but a few end up serving with the navy or the patrol. Enos citizens are preferred by recruiters, as they are divorced from the politics of the Confederation.

Outsystem Holdings
Enos has no outsystem holdings, although it is rumoured that there are Confederation Navy vessels routinely on patrol in the system. Exactly what they are doing or hope to achieve is a mystery, although inevitably rumours abound that one of the planetoid/planets of the system is being turned into a fortress to support naval operations.

MARGESI
Margesi orbits a K4 (orange) star with an M7 (red) companion. The system contains eight other terrestrial planets and a planetoid belt. It was originally named Isenfang and later Gridarvol, eventually becoming Margesi. In 849 the world petitioned the Imperium for Client State status but returned to Sword Worlds membership in 983. Captured by the Imperium in 1084, Margesi was absorbed into the Imperium after the end of the Fourth Frontier War.

Margesi has a standard, tainted atmosphere and about 50% water coverage. It is a good prospect for development but regressed to mid-tech levels during its many troubles and is today heavily balkanised. The loss of Margesi, which lies within the obvious sphere of Confederation influence, is a dent in Sword Worlds pride and its recovery is given far more importance than its economic worth would suggest. At any given time there is unrest among the nations of Margesi, much of it funded by unofficial sources within the Sword Worlds. The Imperial authorities try to keep Sword Worlder influence from causing too much trouble, which in turn results in ever greater resentment due to 'harassment of innocent merchant traffic'. Both the Imperium and Confederation maintain several 'Case Margesi' contingency plans.

CUNNONIC
Cunnonic orbits a K0 (orange) star along with two gas giants and five other terrestrial planets. It has a thin atmosphere and around 70% surface water, making it a good candidate for settlement. Indeed, Cunnonic was settled by the Darrians around -1000 but became isolated when the Maghiz event destroyed the Darrian interstellar state.

By the time the Sword Worlds discovered it, Cunnonic was an independent world with a low-tech industrial base. Economic and political influence were such that Cunnonic remained affiliated with the Sword Worlds despite the rise of the Darrian Confirmation. The population are primarily of Darrian extraction, with around 10% of Sword Worlds origin but have significant cultural differences to more mainstream Darrian societies.

Cunnonic was assigned to the Darrian Confederation in 1084 as part of the peace settlement at the end of the Fourth Frontier War. Its loss was not a major concern, as it was not a 'proper Sword World' and the Entropic Worlds were received instead. Economic involvement continued, with Cunnonic reliant on Sword Worlds corporations for imports of mid-tech tools and equipment. Despite Darrian efforts to reverse this, Cunnonic remains more closely tied to the Sword Worlds than the Darrian Confederation. This is used by the Sword Worlds to create a conduit for intelligence-gathering in Darrian space.

ASGARD

Asgard orbits an F5 (yellow-white) main sequence star, with an M1 (red) companion. The system is quite dense, with two planetoid belts and 10 terrestrial planets besides Asgard. Although rather dry and possessing a thin, tainted atmosphere, Asgard was settled by a long-range (for the time) mission out of Gram in -125. The collapse of starfaring society within the Sword Worlds left Asgard isolated and its people regressed to near barbarism.

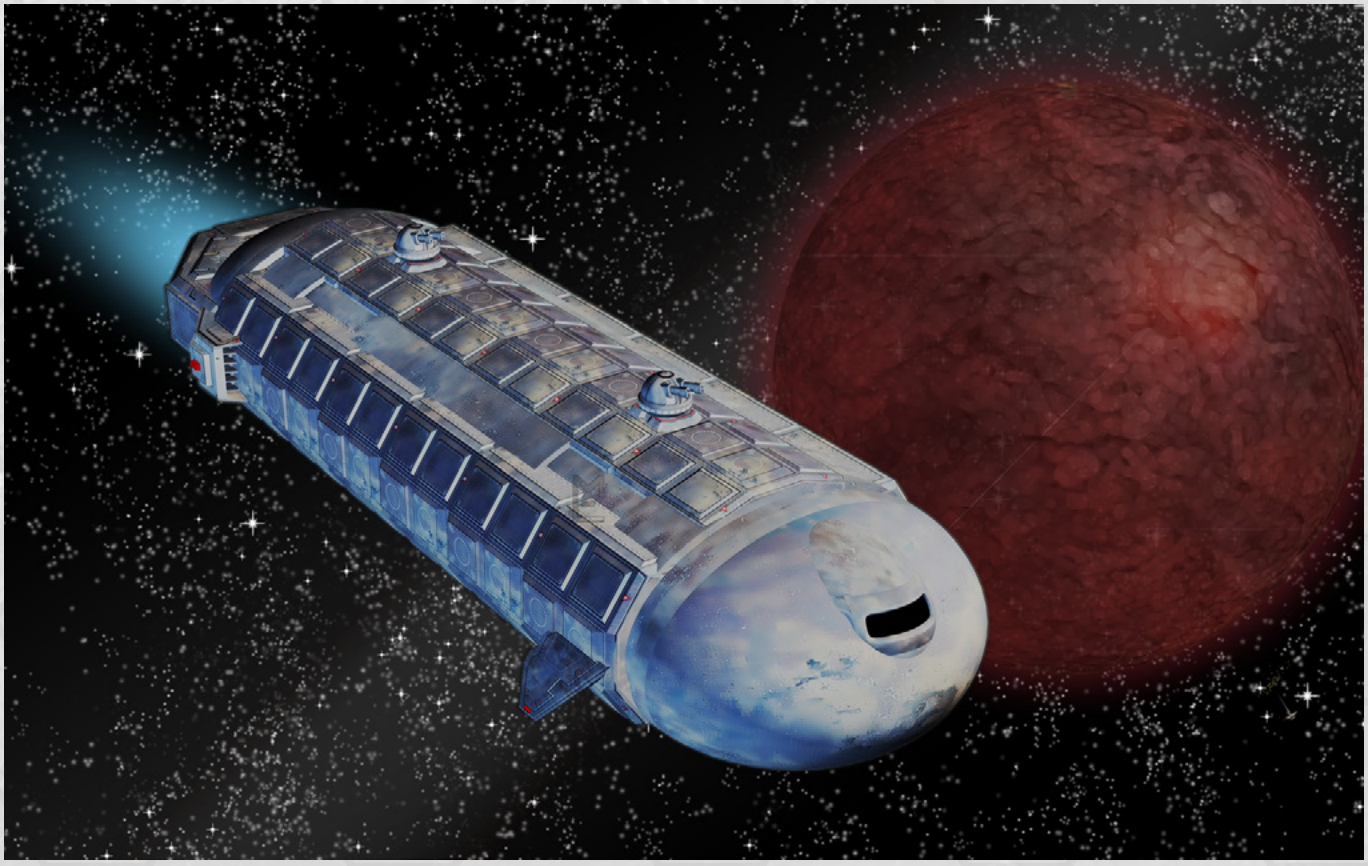
Asgard was contacted by Imperial explorers as they charted the sector and unofficially placed under interdiction soon after. This was made formal in 470 and is still in place to protect a developing TL5 society.

The people of Asgard have very little in common with the modern Sword Worlds, who occasionally make noises about 'reintegrating' Asgard when they want an excuse to make demands of the Imperium. In reality the world is no more desirable than any other, except for its evocative name.

TAVONNI

The Tavonni system orbits a G6 (yellow) star and consists of four gas giants, three planetoid belts and two terrestrial planets along with the mainworld. Tavonni has a standard atmosphere and plenty of water, making it an excellent choice for colonisation. Despite this, it is uninhabited. Old records show that missions did depart for Tavonni around the same time that Asgard was settled and that some small colonies were created. These collapsed for reasons unknown; those not evacuated eventually died out.

Soon after their arrival in the region, the Imperials claimed Tavonni but never got around to settling it. A counter-claim from the Sword Worlds was brought up again and again and, at some point, the Imperials seem to have stopped refuting it. Tavonni thus became a de facto possession of the Sword Worlds, although retaining nebulous status. This was settled at the end of the Fourth Frontier War, when the Confederation agreed to give up its claim to Tavonni in return for concessions elsewhere.



C H A P T E R S E V E N

SECRETS OF THE SWORD WORLDS

Most of what is known about the Sword Worlds is garbled, biased or just plain wrong. Each world has its secrets; skeletons in the closet or state secrets kept for the good of the population. The Confederation as a whole has a number of secrets or little-known facts, which might be damaging if they got out, or projects that must be kept hidden from potential enemies.

THE GIMLI ENDEAVOUR

In ancient Norse mythology, Gimli was a golden hall where those who survived Ragnarok would live in peace and plenty. The name was given to a small and underfunded project designed to help the Sword Worlds survive a catastrophic event such as the Darrians using their Star Trigger or a large scale collapse of interstellar society as happened in the Fimbulvetr. What began as a local survivalist movement gradually expanded into a semi-official project intended to ensure the continuation of the Sword Worlds culture no matter what happened.

As membership grew, a series of exploration missions were sent spinward in search of a habitable world to be a fallback colony. To their surprise, one of these missions was stopped by a Darrian vessel on the way home and received a polite request to join the project. Although it has a different name in Darrian, the Gimli Endeavour is today a joint venture, quietly maintained even through times of tension and war.

The Darrian counterparts to the Gimli survivalists were as concerned about the possibility of the Star Trigger being used as the Sword Worlds and were even more aware of what might happen. There was also the possibility that a superflare event could occur naturally on one of the local stars or that society might collapse for some other reason. Whatever the cause, such an event might spell the end for a closely packed group of star systems. The answer, both Darrians and Sword Worlders agreed, was to move some eggs out of their collective basket.

Several starships are currently in service, using rugged and reliable Sword Worlds technology augmented by advanced Darrian systems. The vessels are well armed and equipped, capable of undertaking long cruises to spinward. It is believed that one or more colonies have already been created but the project's leadership are vague on the subject and will say only that they are engaged in ventures intended to ensure the continuation of Sword Worlds culture.

In fact, the Gimli Endeavour has evolved over time into something the instigators did not anticipate; there are indeed colonies but they are forward bases rather than homes. The vessels of the Gimli Endeavour spend most of their time searching for potential threats and, in some cases, eliminating them rather than seeking habitable worlds to settle on. There is also a scientific base 'out there somewhere' that conducts research as well as collating information gathered by the exploration ships. One goal of this installation is to establish whether Star Trigger technology could be used to control and 'pacify' stars. With no access to the weapon itself, or related technology, this project is in its infancy but the idea of using a version of the feared Star Trigger to prevent rather than bring down Ragnarok appeals to many members of the project.

The Gimli Endeavour is seen as unpatriotic by many Sword Worlders, who say that a joint colony with the Darrians represents the end, not the continuation, of Sword Worlds culture and that cooperation is collaboration. Despite this, it has a considerable following although most involved do no more than donate a little money and take part in 'survivalist' training. This is fun for the average Sword Worlder, involving challenging situations like the 'total collapse of civilisation' scenario, which is basically a camping and problem-solving holiday, only with a lot more rifle shooting and dramatic role-playing by the course staff.

It is widely believed that the Gimli Endeavour is engaged in quiet efforts to eliminate threats to the Sword Worlds and Darrian Confederation. There are reports of an expedition to Chamax in the Foreven sector to study the world-killing 'bugs' that wrecked an entire planet. According to persistent but uncorroborated tales, Chamax bugs have reached other worlds, with Gimli personnel among those trying to contain them. The truth is difficult to discern but it seems likely the Gimli Endeavour is involved in activities far beyond its original remit.

THE DENISOV CONNECTION

The tale of Grand Admiral Denisov is known to every Sword Worlder. Denisov led his fleet with distinction during the Second Frontier War, making a fighting retreat down the Sacnoth Arm credited with delaying final defeat by several months. Even when ordered to surrender, Denisov refused, making a stand at Narsil that was as heroic as it was doomed.

Denisov managed to extract a few vessels from the Battle of Narsil and disappeared for a time. He is now known to have set up a base in the Bowman system, possibly ahead of time as a contingency plan. Imperial forces were distracted and greatly weakened in the years immediately after the war, with most of the Spinward Marches Fleet heading for Capital to end the Imperial Civil War. Denisov's handful of ships were sufficient to cause a great deal of trouble for the post-war Imperials and his tactical skill kept his force intact where a lesser commander would have been run down and brought to action by superior forces.

Denisov's raids were little more than a gesture of defiance. He may have hoped to inspire rebellions against Imperial occupation on worlds that had been taken, or perhaps he was simply fighting for honour, but he stood no chance in the long term. All the same, it took nearly seven years for the Imperials to find his base at Bowman. Brought to action by a superior force at Mertractor, Denisov's ships had to return to base for repairs and were tracked.

The remnant of Denisov's force was cornered at Bowman and forced to surrender but the Grand Admiral himself was not among them. According to official sources, Denisov survived the action at Mertractor and was lost in the Bowman Belt whilst evading pursuit. Various ships reported exchanging fire with one or more Sword Worlds vessels and credit for killing Denisov was claimed by several captains, some of whom went on to illustrious political careers based on their supposed exploit. The truth is that nobody really knows what became of Grand Admiral Denisov.

There are those who wonder if Denisov did not slip away again but if so he would surely have resumed anti-Imperial actions or at least come home to a hero's welcome after the peace settlement. It is more likely that he was either killed in action at Mertractor (and the fact concealed for morale) or was indeed lost aboard his heavily damaged vessel in the belt.

Grand Admiral Denisov occupies a paramount niche in the pantheon of Sword Worlds heroes; the tragic admiral who would not quit the fight. Every now and then 'Denisov relics' surface, only to be proven fakes by experts. Yet the search goes on for his ship and his remains. The recovery of Denisov's sword, or the chair he commanded the fleet from, would be inspirational to many Sword Worlders. The Bowman Belt has been mined for centuries and nothing has been found, however a star system is a big place. Perhaps Denisov's ship might still be there somewhere.

It is possible that Denisov had other bases and that finding his ship might reveal their locations. The wreck might be rebuilt as a powerful symbol of Sword Worlds pride and stubbornness. A state funeral for the great man would be a Confederation-wide event and those who brought him home at last would be assured of heroic status. Thus the search goes on after all this time, in the same spirit as the great man himself.

THE LOST SWORDS

Having voyaged very far from home to set up their colony at Gram, starfaring was in the blood of the early Sword Worlders. Once starships could be built in the Sword Worlds, the majority were tasked with establishing, maintaining and defending the colonies that would become the modern Confederation. A few, however, were sent farther afield.

These ships were, for the most part, general-purpose armed transports that could conduct exploration and reconnaissance operations as well as trading with whomever they happened to meet. The majority of missions were undertaken within 20 parsecs of Gram but a secondary area of interest was declared out to 50 parsecs. Records from this time are patchy but it seems that whilst some of the early explorer/traders were lost, the majority made several long cruises before being re-tasked to more mundane supporting roles among the developing Sword Worlds.

Occasionally, a group obtained one of these older vessels for its own purposes. Usually this involved providing an equivalent value of goods or service to the central colonial administration but all manner of deals were struck over time. Some of these ships were used to repeat the missions they had previously been carrying out, although with a new owner and perhaps a different agenda. Others were launched on much more ambitious missions.

Over the years prior to the coming of the Third Imperium to the region, a number of exploration and colonisation missions were carried out. Most failed for lack of funding or expertise. Others, like the colony on Asgard, were cut off and eventually absorbed into other states or went their own way. There may be populations who

are genetically Sword Worlders but have forgotten their heritage as a result of long isolation and regression from a failed colony mission.

Just after the Second Frontier War there was a surge of interest in colonies to spinward, far from the Imperials. This led to a rash of expeditions aboard vessels not ideally suited to long-range colonisation, most of which ended in disaster. Since that time the occasional attempt has been made to found a new home far away. It is a measure of Sword Worlds society that this project more or less matches what the Gimli Endeavour is striving for but is entirely separate due to idealistic differences.

The largest of the colonial missions began in 621, just after the Second Frontier War. The peace settlement included a requirement to turn over several Sword Worlds warships for dismantling at Imperial ports, which was unacceptable to many members of the navy. Some elements of society could not accept defeat or Imperial occupation of some Sword Worlds and embarked on a plan to 'redirect' the vessels along with transports essentially hijacked from their moorings. Such was the level of tacit approval and sympathy for the endeavour that these seizures went off more or less bloodlessly, and in late 621 a fleet of transports escorted by several naval vessels – some of which were not on the decommissioning list – left Sword Worlds space headed spinward-rimward.

The fate of this fleet is unknown but it carried sufficient resources and personnel to set up viable colonies. These hypothetical distant colonies are collectively known, along with those set up by earlier missions, as the Lost Swords. Exploration vessels have been sent to find them,but little evidence has ever been found. Still, there are tales told of how someday the Lost Swords will send a fleet back to the homeworlds. Depending on the version, they will crush the Darrians, conquer the Sword Worlds or beg for help against a terrible foe. Variations have been the subject of countless dramas and the occasional farcical comedy over the centuries.

The Lost Swords expedition was repeated on a smaller scale in 1090, not long after the Fourth Frontier War. This time the source of vessels was warships too badly damaged to be economically repaired. Rather than see them go to the breakers, the Confederation Navy conducted limited repairs and modified armament before placing the ships up for sale. As a result, groups intent upon exploration or colonisation acquired a force of potent vessels which, whilst demilitarised, retained enough firepower to take care of themselves.

Most notable of these was the battlecruiser *Admiral Denisov*, a source of pride to the fleet before and during the war but too badly damaged to be of further service. She was scheduled to be broken up and replaced by a new-build battlecruiser of the same name but instead transferred to an unknown operator under the name *Denisov.* This slight change kept the fleet register correct and placed a weary but extremely powerful warship in the hands of a private concern. *Denisov* left Confederation space in 1102, after an extensive refit. Her stated mission was to find the Lost Swords colonies and re-open communication with them but there are those who wonder if *Denisov* might be on an entirely different mission.

THE JOYEUSE CIVIL WAR

The war on Joyeuse is no secret and it is widely known that other members of the Sword Worlds Confederation are assisting the various factions. What is less known is how close the war has come to fracturing the fragile unity of the Confederation. The world is blockaded by the Confederation Navy, conveniently operating from its base at Thoslinn in the same system. In theory, all vessels approaching the highport or planet are scrutinised and no unauthorised traffic is allowed planetside. In practice, humanitarian aid convoys are routinely allowed through the blockade without inspection, as are vessels bearing diplomatic writs from one or another of the Sword Worlds governments.

It is likely that some or even most of these visits are legitimate and certainly there is work being done to mitigate the effects of the war or prevent destruction of key infrastructure. However, at least some of these vessels are carrying arms and equipment to various factions. More than once a region has been pacified only to explode back into violence as hardcore holdouts of a faction receive new shipments of arms and ammunition.

Disputes among blockade ship commanders are common, as one accuses another of allowing an arms-carrying ship through to a favoured faction whilst blocking aid to another. Some accusations are well-founded, others less so and all are insulting to the honour of a senior naval officer. Angry confrontations are common, either in person at Thoslinn base or over the comms system of a warship with weapons primed.

Shots fired across the bow of a suspect vessel refusing to stop are sometimes answered with shots across the bow of the intercepting ship from the one that just cleared the suspect to proceed. So far there have been no incidences of actual damage to warships but it seems only a matter of time before a situation escalates out of control. Already the blockading force is operating as groups of friendly vessels rather than efficient squadrons. Captains would rather be escorted by a

vessel they can trust than one that might join the other side in an incident. This situation makes it easier for smugglers and arms runners to slip through the gaps in the blockade, which in turn generates more allegations of corruption and favouritism among the captains of the blockading force.

The situation planetside is little better. A peacekeeping force from the Confederation army, with a strong contingent from the Patrol, was landed early in the conflict and has been reinforced since. Tasked with protecting infrastructure and preventing needless casualties, the army has ended up being shot at by all sides whilst tied down by orders not to act against warring factions other than in self-defence as this could tip the balance of the conflict. The Patrol contingent, meanwhile, is tasked with apprehending those suspected of war crimes and tackling the many criminal groups profiteering from the conflict. Its personnel are forced to operate under very difficult circumstances, against a background of shifting hostilities.

It is not uncommon for the peacekeeping force to be ordered to clear an area of insurgents from some or all factions and to actually succeed, only to be forced to pull back by changing orders or political influences. This is frustrating for troops deployed to Joyeuse, some of whom feel they are virtually besieged in their bases and unable to trust units contributed by other worlds. In some cases this is due to the presumption of sympathy for a faction, in others because the force has suffered a setback and damage to its reputation as a fighting unit.

The situation on Joyeuse is, if anything, getting worse. It has been described as similar to a chip out of a sheet of glass, causing radiating cracks. It is not possible to predict in what direction a crack will extend or where it will stop. If enough cracks are produced, the whole sheet may shatter and there are those who think Joyeuse may be the flashpoint for a return to the old ways of a fragmented Sword Worlds, with short-lived alliances battling one another for dominance. In that, Joyeuse is a microcosm for what could happen to the whole Confederation.

THE HOLMGANG COMPACT

In the ancient Norse lands there were two kinds of duel. The first was known as Einvigi and consisted of an immediate challenge and fight. Combatants fought with what they had but were allowed to arm themselves first. There was no dishonour in a warrior equipped with good weapons and body armour challenging a man who could field only a spear and shield, nor was there any legal prohibition on blood vengeance against the victor. The only rule was that the fight was between agreed participants only and nobody else could join in.

The Holmgang was created as an attempt to limit the consequences of a challenge. There were standard rules and the encounter took place at an agreed time and place. More importantly, the outcome was considered the end of the matter and any vengeance taken afterward was subject to the usual laws – killing the person who maimed your brother in a Holmgang was considered murder.

Today's Holmgang Compact is a similar attempt to provide a safety valve for disputes and limit consequences. It is not legal anywhere in the Sword Worlds but considered socially acceptable in most places. The usual way of things is that if an incident is known to have been a properly arranged Holmgang the authorities will not investigate too closely so long as nobody was killed. A law enforcement officer who witnessed the duel might say to someone: 'I believe this incident might be a Holmgang' and receive the semi-ritualised response, 'I cannot say if it is or not' at which point the matter is quietly dropped. A different answer requires investigation and a death is always investigated.

This is all entirely illegal in most places, of course, and nowhere is it explicitly permitted but the Holmgang is an ancient and honourable tradition respected by most. The challenge to Holmgang must be delivered in writing by a reputable third party who must be an 'honourable friend' – a professional cannot be used in the manner of legal documents. It must be accepted and the format agreed in writing but it is a grave dishonour to use these documents for anything other than to informally prove the affair was a true Holmgang. The letter of agreement could be used in court to confirm the affair was consensual but to do so would ruin whomever did it. It could, however, be privately shown to a judge who might then throw out the case if favourably inclined.

This strange straddling of the line makes perfect sense to those who subscribe to the Holmgang Compact, which is by no means everyone. Among those who believe the Holmgang is honourable (if illegal), the process after acceptance is simple. The combatants agree to the format and location, meet and fight. The matter is considered settled at this point and someone known to have taken part in a Holmgang to then try to continue the matter by other means will be discredited. It is usual for the agreement to include a penalty or restitution imposed upon the loser.

For example, a man who feels his sister has been mistreated by her husband but cannot do anything through legal channels could simply beat him up but



that would be a crime that might have consequences. He could instead challenge the miscreant to a Holmgang, which could be fatal but would likely have no legal consequences. If he lost, the challenger would not be able to carry the feud on through the Holmgang Compact or use the incident against the husband but if he won he would be able to demand agreed restitution. Guilt and innocence have nothing to do with this process and it is not a 'judicial duel' in any sense. It is simply a challenge between two men (or women in male roles) to settle a matter outside usual channels.

The Holmgang is fought with a traditional weapon, a light-bladed cutting sword somewhat longer than a seax. It has a thrusting point but is normally used to deliver shallow slicing wounds unlikely to be fatal. The use of any form of armour or any other weapon is forbidden, although wrestling and striking are common. The duel is fought until one combatant or the other gives up or his 'honourable friend' declares that he cannot continue. Any blow struck after this surrender is seen as a particularly dishonourable attempt at murder.

Although the Holmgang challenge and acceptance cannot be made public in an official manner, and media outlets do not report on incidents, word that someone has fought always gets out through informal channels. To fight or make a challenge over a significant matter is seen as worthy; to refuse a challenge or issue one frivolously is damaging to reputation.

Someone who fights and loses honourably, taking wounds rather than quitting instantly, is considered to have acted properly and may actually gain in social status. There are numerous dramas about worthy men who cannot get their dishonourable enemies to meet them in Holmgang and tragi-comic tales of men who endlessly fight for honour and lose but become reluctant heroes to their friends.

There is even a rather odd tradition of a rich man picking a fight with a poor one and lending him a very valuable sword with decoration that can be pried off and sold, on the condition that he must keep it if he loses. This can be used as a way of helping out a man who will absolutely not accept charity no matter how bad his situation might be. It is a measure of how convoluted Sword Worlds society can be that sticking a sword in someone in order to make him accept money he needs to pay debts is considered an honourable deed.

Generally speaking, the average Holmgang participant will yield when his END reaches zero. However, rage, adrenaline and pride can keep men fighting over the most trivial matters, even with life-threatening injuries. Most of those who train in the Holmgang fighting style learn wrestling moves to disarm their opponent or throw him to the ground and will try to end the matter with a winding kick or punch, or a knockout blow with the pommel of the sword. Despite this, fatalities do occur.

Sometimes the authorities will deliberately drag their feet over arresting someone who has killed a man in a fair Holmgang, giving him a chance to flee into exile rather than face prosecution. These 'noble outlaws' often make their way into Imperial space, contributing to a general impression of the Sword Worlds that is skewed in the direction of reckless, combative individuals who place pride and personal honour above common sense. This impression is not the whole story but it is certainly a part of it.

C H A P T E R E I G H T

SWORD WORLDS TRAVELLERS

Playing Sword Worlders, and portraying them in a game, can be tricky. It is easy to slide into stereotypes – macho chauvinists who swear by Odin all the time and think they are better than everyone else, taking stupid risks for no good reason. The reality is far more complex and much more interesting.

The sexist attitudes of the Sword Worlds can be distasteful but *Traveller* is a game about strange worlds and alien wonders, and that means foreign cultures need to be different. Sword Worlds sexism is not absolute and it is not based on the idea that women are inferior. It is more that – in the eyes of the typical Sword Worlder – women have a different role that is just as important as the 'male' jobs. Women are treasured and respected, because they are the heart of the community and its future too. A Sword Worlds male knows that ultimately he is expendable but his wife, sister or girlfriend absolutely is not.

A surviving historical text from Old Earth says about Norse culture that a well-matched married couple was an effective team. Partners should have differing skill sets to enable them to deal with the widest possible situations. A man was responsible for everything outside the house – farming, trading, fighting, diplomacy and politics – and the woman was in charge of everything within the house. Of course, the man spent a lot of his time in that house, which might offer a different perspective on who was really in charge.

Sword Worlds culture is built on this ideal, although role is more important than gender. Women can take on 'male' roles; men can take on the supporting/facilitating role associated with females. This does not affect sexual identity; a man who stays at home to raise children and run a household is fulfilling a 'female' role but he is still biologically male with whatever preference for partners he would normally have. He will be treated as socially female in many ways but is sexually male. The same goes for females in 'male' roles; once accepted as competent they are socially 'male' but sexually they are still females. Sexual preference is not indicated by choice of social role.

Those women who choose to ignore the usual pressure to enter 'female' roles sometimes face condescension or resistance from males, sometimes not. Much depends on the males' previous experience in similar situations. In this regard, women are under greater pressure to succeed than men, since failure will make life harder for others who want to tread the same path. On the other hand, a Sword Worlds male who has several female 'brothers' in arms who have proven their worth is likely to accept a woman serving alongside him.

The attitude to gender and social role is complex. On the one hand Sword Worlders of any gender are likely to believe there is a natural order to things – men are heroic daredevils who get stuff done; women support, facilitate and pick up the pieces when it all goes wrong. Society can survive serious setbacks because its heart is kept safe at home. Patronising as it sounds, this attitude is sincere and generally accepted. However, if a person wants to do a job and can do it acceptably well, they have the right to do so unless this puts children at risk or disadvantage. This is the root of Sword Worlds social philosophy – the fabric of society must be preserved so children can grow up and continue the grand Sword Worlds tradition.

Great importance is placed upon personal integrity and courage – of a moral as well as physical sort. A criminal who admits guilt is given grudging respect; someone who tries to weasel their way out of the charges is despised more than their crime would merit. Rank and position are generally respected but it is the actions of people that matter. Thus a military officer deserves respect not simply for being one but for the effort he had to put in to achieve his rank. 'Don't tell me what rank you hold; tell me what you had to do to get it' is a common yardstick for gauging the worth of an individual.

Sword Worlders despise and tend to be openly contemptuous of those who hold inflated rank or empty titles. Inherited rank, such as a noble title, is fine as long as the holder is striving to live up to the expectations of the position. Invented or false ranks, or failing to live up to standards expected, are worthy only

of contempt. Sword Worlders are suspicious of foreigners with impressive titles that might simply be made up or that could be bought or otherwise not earned even if they are worth holding at all. Ranks and titles from a respected source are worthy of respect unless the holder acts poorly but overall an individual will be judged on their actions and an organisation or state will be judged on how its members represent it.

Reputation is thus extremely important to Sword Worlders. Whilst few follow Aesirism with any real fervour, if at all, some of the wisdom attributed to Odin is enshrined within Sword Worlds culture. Foremost among this is the saying that 'all things pass away, save the judgement of a man's actions'. A Sword Worlder will be – rightly – highly concerned about what others think. The skills demonstrated are what garner them respect as a craftsman, scientist, soldier or starfarer, not the qualifications on display. If they are thought to be incompetent or a liar, this will affect their career and perhaps even the course of their life. On the other hand, playing safe does not establish a reputation for skill and daring, so Sword Worlders have a tendency to show off their skills and take risks others might shrink from.

This does not necessarily translate to extreme recklessness. Attempting to climb a notoriously dangerous cliff face is a worthy endeavour; doing it with inadequate preparation is just stupid. Sword Worlders will act boldly but will also mitigate and manage risks. A man willing to admit a task is beyond him is admired for his honesty and only those who can demonstrate they could accomplish it are worthy of criticising him. That does not mean it will not happen or that Sword Worlders will accept derision from those with greater skills. He might not be skilled enough to accomplish the task but how hard he can punch is another matter…

Sword Worlders consider it a hard courtesy to speak truth even if it is hurtful. It is not worthy to enjoy telling someone what they do not want to hear but it must be done. Those who do not want to hear sometimes become offended, which can be hazardous to the speaker. This makes it all the more worthy to speak truth. Those who prefer polite lies to hard truths are to be despised and to deliver such lies is to insult the hearer. Of course, this attitude is at odds with the norms of many societies elsewhere, which can lead to friction and the overall impression that Sword Worlders are unsophisticated boors unable to function in polite society.

Overall, the average Sword Worlder is honest and forthright, to the point others might consider rudeness, but not without good reason. He is bold and sometimes reckless, but not stupid. He is loyal to those he considers worthy but it is hard to live up to his standards. He is proud and stubborn but will respect and be quietly grateful to those who let him get out of an unwise promise without losing face. People who understand how interpersonal relationships work in the Sword Worlds will find him a firm ally and a good friend; those who fail to show him proper respect will encounter his temper.

Finally, the 'Viking' aspect should be used subtly. Sword Worlders admire an idealised version of Old Earth Scandinavian and North European culture, especially tales of daring explorers, warriors and traders. This does not mean they strut around in horned helmets drinking space-mead. They are not 'Vikings in space'; they are Sword Worlders.

PSIONICS AND CYBERNETICS

Sword Worlders are, for the most part, suspicious of psionics. The idea that some people can do out-of-the-ordinary things is not the problem; it is more that the ability cannot be earned through work and endeavour. It is acknowledged that learning to use a gift takes effort but the idea that a wholly unworthy person might be born a telepath for no apparent reason is an affront to cultural values.

In the Norse legends, Odin sought wisdom so keenly that it cost him one of his eyes and this seems right to the average Sword Worlder. The majority do not believe in Odin as a god but the story is a good morality tale – great wisdom comes at great cost. The majority of Sword Worlds research into psionics is based on the idea that there must be a cost and finding out what must be sacrificed to gain psionic power will give Sword Worlders the chance to choose whether or not to pursue it. In short, Sword Worlds scientists want to make psionics something anyone willing to pay the price can earn, because that will make it 'right' as part of the universe.

There are parallels between psionic abilities, poorly understood as they are in the Sword Worlds, and the seidr, or magic, used by Odin in the Norse legends. Seidr was considered a female art, yet Odin the Allfather – probably the most manly man of them all – practiced it. This contributes to a feeling that psionics are beyond the ken of mortals and best left alone. Those who can use the talents and do so in worthy ways, are respected for it but also considered 'not quite right' in Sword Worlds society. Their status might be compared to that of unreliable but highly useful mystics. None of this

precludes an alliance with the Zhodani Consulate. They are known to be honourable people, if strange, and political or strategic considerations greatly outweigh reservations about psionics.

Cybernetics are also viewed with suspicion. Functional devices such as artificial eyes or hands to replace body parts honourably lost are acceptable and may be viewed as a badge of honour in some areas. In others, the owner may be considered 'no longer whole' and pitied, which borders upon condescension – and that is unacceptable to the subject. Military veterans' organisations and workers' advocate groups tend to push the idea of respecting the cybernetics user for what was sacrificed rather than pitying them for what was lost but attitudes still vary.

Cybernetic augmentation is distasteful to the average Sword Worlder. Voluntarily giving up a natural body part for an artificial one is questionable at best and cybernetics seem to be a way of gaining capabilities not earned through worthy endeavour. Thus anyone who chooses to go down this route is seen as giving up pieces of themselves to gain advantages, rather than earning them fairly through endeavour. There are those who try to push the 'sacrifice for power' concept but this is often seen as self-justification.

THE PATROL

The Patrol grew out of the original interstellar law enforcement and security service created as the first colonists left Gram for the other Sword Worlds. It has never left behind its origins as a military police force but grown into additional roles. Personnel entering the Patrol undergo a slightly unusual career path.

Applicants must be 30 years old or under and DM+1 is applicable for each term successfully completed in the army or navy before applying to the Patrol. Graduates of university or an academy are also treated favourably; DM+1 applies to application, increased to DM+2 for Honours graduates.

However the candidate enters the Patrol, the process is the same thereafter. The first year is spent in basic training followed by a probationary period assisting with routine security and incident response tasks. Those who successfully complete this phase move on to advanced training where they repeat the process in one of the three specialist arms of the Patrol.

A high proportion of candidates are washed out at the end of the first and second phases, ensuring that only the best qualify to begin their careers. This is reflected in a short first term with two 'qualification' checks rather than survival and promotion. Those who fail the first check are eliminated from the programme, although they will usually find favourable reception with agencies that have lower standards, such as a small merchant line's security arm. DM+1 applies to attempts to enter such agencies, at the Referee's discretion.

After passing the first qualification check, the candidate can choose whichever arm they wish to enter. Most are wise enough to pick one that suits their aptitudes. The second qualification check is based upon the requirements of the specific arm and if passed the candidate enters the chosen arm with a rank of Kadet. At least one term must be served in this arm of the Patrol before the Traveller can muster out or change career and no mustering-out benefits are gained for the training/patrol period.

Qualification

	QUALIFICATION	AUTOMATIC SKILL	ADDITIONAL IF QUALIFIED
Basic	END 9+	Gun Combat 0 Electronics 0 Melee 0	Medic 0
Advanced (Security)	END 7+	Streetwise 0	Gun Combat 1
Advanced (Investigative)	EDU 8+	Investigate 0	Deception or Persuade 1
Advanced (Interstellar)	INT 8+	Vacc Suit 0	Mechanic or Steward 1

1 PATROL

Qualification: INT 7+
Any Sword Worlder can join the Patrol's training programme, up to the age of 30.
DM+1 for any previous completed term in the Army or Navy.

ASSIGNMENTS

Choose one of the following:

Security: You are a law enforcement agent or member of a security team protecting an installation or person.
Investigative: You are a detective, specialist investigator or intelligence operative.
Interstellar: You are a member of the interstellar law enforcement arm, hunting pirates and smugglers.

CARREER PROGRESS

	SURVIVAL	ADVANCEMENT
Security	END 6+	INT 7+
Investigative	INT 7+	EDU 9+
Interstellar	DEX 7+	INT 8+

MUSTERING OUT BENEFITS

1D	CASH	BENEFITS
1	Cr1000	Weapon of Honour
2	Cr2500	Letter of Introduction
3	Cr.5000	Adulation
4	Cr10000	Golden Handshake
5	Cr25000	Favour
6	Cr50000	+1 SOC
7	Cr100000	Nobility

SKILLS AND TRAINING

1D	PERSONAL DEVELOPMENT	LEADERSHIP (MIN. RANK 2)	ADVANCED (MIN. EDU 8+)
1	Athletics	Leader	Electronics (any)
2	END +1	Diplomat	Medic
3	Melee	Persuade	Science
4	Gun Combat	Tactics	Advocate
5	Recon	Carouse	Explosives
6	Stealth	Investigate	Vacc Suit

1D	SECURITY	INVESTIGATE	INTERSTELLAR
1	Gun Combat	Electronics (Computer)	Electronics (sensors)
2	Heavy Weapons	Investigate	Engineer
3	Flyer (grav) or Drive	Persuade	Vacc Suit
4	Recon	Investigate	Pilot
5	Persuade	Deception	Astrogation
6	Streetwise	Admin	Gunner

RANKS AND BONUSES

RANK		BONUS SKILL	SECURITY BONUS	INVESTIGATIVE & INTERSTELLAR BONUS
0	Kadet	Streetwise 1	—	—
1	Korporal	Gun Combat 1	Investigate 1	Vacc suit 1
2	Sergent	—	Admin 1	—
3	Konstabel	Leader 1	Leader 1	Leader 1
4	Leutnant	—	—	Tactics 1
5	Kapiten	—	—	—
6	Oberst	—	—	—

MISHAPS TABLE

1D	MISHAP
1	Injured in the line of duty, you must roll on the injury table and leave this career.
2	Someone affected by your work sets out to gain revenge. Gain an Enemy.
3	You are implicated Patrol corruption, rightly or wrongly. Lose SOC –2 but you are not ejected from this career.
4	You are the subject of multiple complaints about your methods. Lose 1 Benefit roll but you can remain in this career.
5	You uncover an uncomfortable truth about someone important you cannot act against. You can extort funds totalling Cr500000 on mustering out but gain an Enemy, or say nothing and gain a Contact with a dubious background. If you try to act against this person you are forced out of the service forfeiting all benefits but gain SOC +1 for your courageous moral stand.
6	You are injured (roll on the injury table) but can remain in the service if you pass an Average (8+) END check. If you are successful, you gain SOC +1 and are lauded as a hero.



EVENT TABLE

2D	EVENT
2	Disaster! Roll on the Mishap table but you are not ejected from this career.
3	You expose spies for a criminal or enemy organisation within your own ranks, gaining D3 Enemies but gaining an extra roll on the Mustering Out Benefits table.
4	You are seconded to assist a naval or army intelligence operation. Gain a Contact in the relevant service.
5	Routine development of informants and contacts nets you D3 Contacts.
6	You are selected for advanced training in your own field. Select one skill from your Service Skills table and increase it by 1 level.
7	Life Event. Roll on the Life Events table.
8	You infiltrate an enemy or criminal organisation. Gain one level of Deception or Streetwise.
9	You are part of a task force involving personnel from different arms of the Patrol. Gain one level in a skill rolled on the Service Skills chart of a different arm. You also gain a Contact.
10	You are selected for highly advanced, intensive training. Gain one skill from any Patrol career table at level 2 if you do not have it already, or advance any skill you have by 1. However, the process is exhausting. Make an Average (8+) END check. If you fail, you must leave the Patrol at the end of this term.
11	You are a responder in a major incident or disaster. Gain one level of Medic or Leader skill.
12	You make or are involved in the arrest of the year, gaining you automatic promotion next term if you remain in the service and an extra benefits roll whether you do or not. Your success alienates some colleagues however, and you gain D3 Rivals.

MUSTERING OUT BENEFITS

Weapon of Honour: The former Patrol agent is presented with a decorative but functional version of his service weapon, or perhaps a ceremonial sword, to commemorate his service. A second receipt of this benefit grants 'diplomatic' status to the weapon, which will usually allow it to be carried even where it would be normally prohibited. Further receipts are taken as a level of skill with the weapon of honour.

Letter of Introduction: A Letter of Introduction can serve as just that, perhaps opening doors for the former agent. It is issued by a reputable figure and essentially states that the former agent is a person of good character and proven competence. It can be used, once, to assist in a difficult situation. Whilst not quite a 'get out of jail free card' the letter will inspire local officials to treat the Traveller with great respect and perhaps even defer to him, since he has the support of a notable who might not take kindly to mistreatment. A Letter might be used to take charge of a situation or to persuade a judge to exile the Traveller rather than sending him to prison for decades. Once used in this manner the Letter becomes useless but of course the Traveller may have more than one.

Adulation: The Traveller is feted as a bit of a hero. This has no monetary advantages but can be useful for those who want to go into politics or just get a few free drinks. A Traveller who has received Adulation will be occasionally invited to be an after-dinner speaker or to attend local events like the opening of a library, essentially turning the Traveller into a Z-list celebrity. Very occasionally, Adulation leads to something more concrete, like an offer to take the starring role in a drinks commercial or a cameo in a popular vid drama. Whilst this sort of thing might seem trivial to outsiders, attention of this sort is meat and drink to a Sword Worlder.

Golden Handshake: The Traveller receives a leaving bonus equal to 2Dx2500 Credits. This is accompanied by a ceremony (of course) laying out the reason why this figure was chosen. 'We auctioned off all the goods you seized from the Sector Four Gang… good work on that one!' Again, the recognition is worth more to the average Sword Worlder than the money.

Favour: Someone in power owes the Traveller a favour. It can be called in once, although the powerful figure might be willing to help out in small ways without considering the Favour called in. Most notables are honourable people or have to maintain the pretence, so the Traveller can be assured he will receive help in most circumstances. The Favour might have an interesting story attached, and be by someone the Traveller has a dubious relationship with, such as a pirate leader or a foreign diplomat.

Nobility: The Traveller is granted a minor noble title and is elevated to SOC 10 if he does not already have a higher Social Standing. Subsequent receipts of this benefit add a small amount to the Traveller's holdings and +1 SOC. Note that SOC is a function of the respect the Traveller is held in, not his social position. Gaining a SOC higher than the planetary Hertug means the Traveller is more highly respected than the king… but obviously does not outrank him.

The Traveller's Aid Society presents

JAYNE'S GUIDE

TO SPACECRAFT OF THE SWORD WORLDS



HIGHGUARD: SWORD WORLDS

The majority of starship systems used in the Sword Worlds Confederation are standard designs but in some cases a different approach has been taken to solving the same problems. This is sometimes due to technological constraints but often the reason is simply a different mindset.

Class names are usually derived from traditional vessels of the Scandinavian and North European navies of Old Earth. Many were place names in their original sense; whilst the original city or region has long been forgotten by the Sword Worlds, the traditional names live on. Other class names have more modern derivations; usually famous battles, people and places or world of origin.

PROJECTILE GROUND DEFENCE WEAPONS

Ground-based defence weapons are not as effective as those mounted on starships or orbital forts but are cheaper to deploy and maintain. A large part of the cost of any military is salaries and personnel who do not need to be trained to operate in space cost much less than naval spacehands. Thus ground defence weapons may be attractive to some powers and are particularly favoured by the Sword Worlds.

The base difficulty of hitting a target in orbit is Average (8+), assuming the vessel is in a predictable orbit and not making evasive manoeuvres. This is modified by a negative DM based on the Size code of the world. The vessel's manoeuvres and the atmospheric density are also factors, as shown on the Ground to Orbit table.

Ground to Orbit

Factor	DM
World Size 0–2	+0
World Size 3–5	–2
World Size 6–8	–4
World Size 9+	–6
Very Thin or thinner atmosphere	+0
Thin atmosphere	–1
Standard Atmosphere	–2
Dense or thicker atmosphere	–4
Target in stable orbit	+0
Target manoeuvring slowly	–1
Target manoeuvring quickly	–2
Target evading	–Vessel's Thrust

For example, a ground-based weapon firing at a target making slow manoeuvres in orbit around a standard atmosphere, Size 8 planet suffers DM-7. This makes a hit unlikely but smart munitions can offset this.

PLANETARY DEFENCE CANNON

Planetary Defence Cannon are ground-based weapons intended to pose a threat to orbital vessels. Variations on the theme use rocket-propelled projectiles but the majority of PDCs are essentially super-large rail guns or mass drivers. They are, by definition, very large and require tremendous power to operate, making them rather obvious to an attacker equipped with even basic sensors.

PDCs require an extremely long acceleration tunnel (known as the barrel) and cannot traverse rapidly enough to engage fast-moving targets. Heavy PDCs are usually fixed, relying on their projectile to make final course corrections, whilst lighter weapons may be on a limited-traverse mounting. This is still not sufficient to track a descending assault ship but PDCs are not intended to do that. Instead, they hurl a projectile at incredible velocity towards the target, at which point it makes targeting manoeuvres using fins (if in atmosphere) or directional rockets.

The chance of striking a target the size of a large starship with a single projectile is not great, so PDCs use three types of ammunition. All are starship scale weapons.

Penetrator munitions have a single projectile and are normally used against large and slow-moving targets such as assault transports in low orbit. Penetrator rounds have the AP trait but suffer DM-2 to attack rolls.

Standard munitions break open to deliver a pattern of heavy submunitions, increasing the chances of a hit at the cost of penetrating power.

Scatter munitions contain large numbers of inert projectiles, resembling heavy ball bearings, and are used to spray the flight path of smaller craft in the hope of multiple hits. Scatter munitions are often used to set up a barrage through which the enemy must fly rather than being aimed at specific targets. They have no AP capability but gain DM+3 to attack rolls.

LIGHT PLANETARY DEFENCE CANNON

The light PDC resembles a large railway gun, normally mounted on a turntable in an installation but can be carried on a large maritime ship or heavy rail carriage. The weapon requires considerable power and when deployed as a rail unit is normally accompanied by additional carriages containing reactors and capacitors along with defensive weapons. A light PDC can fire once every round. It cannot traverse fast enough to track a target but can be aimed in the general direction of an expected attack, with the munitions package steering itself to contact.

WEAPON	TL	RANGE	POWER	DAMAGE	COST	TRAITS
Light PDC	10	Short	35	Varies	MCr26	—
Penetrator Munition	10	—	—	3D	MCr0.5	AP 4
Standard Munition	10	—	—	2D	MCr0.4	AP 2
Scatter Munition	10	—	—	1D	MCr0.3	—

HEAVY PLANETARY DEFENCE CANNON

A heavy PDC can only be mounted in a fixed installation. Its enormous acceleration tube is capable of slight movement, around 15° traverse and elevation, but more than this is impossible given the stresses on the weapon. Heavy PDCs are normally positioned to fire over critical installations such as the downport or a major city, engaging vessels attempting an assault or which stray into its field of fire. This is quite wide at orbital distances, narrowing considerably as a vessel enters atmosphere. Heavy PDCs are sometimes considered area denial weapons; once an enemy knows where the gun can fire, they can stay out of its field of fire but at least that limits their options.

WEAPON	TL	RANGE	POWER	DAMAGE	COST	TRAITS
Heavy PDC	10	Short	90	Varies	MCr200	—
Penetrator Munitions	10	—	—	8D	MCr1.5	AP 8
Standard Munitions	10	—	—	4D	MCr1	AP 4
Scatter Munitions.	10	—	—	2D	MCr0.75	—

INTEGRATED MUNITION SYSTEM

An Integrated Munition System is the equivalent of a 'spinal mount' for vessels armed with missiles, running the length of a ship and surrounded by heavy bracing. A vessel cannot have a spinal mount and an IMS.

In theory, any vessel can install an IMS, although there is a base tonnage requirement that makes it impractical for small ships as the system consists of hoists, handling rooms and launchers. The tonnage and cost is for the handling and launch system, which includes space for ready ammunition. Additional missile magazines can be added to the vessel and are connected to the handling system without adding to tonnage or cost.

An IMS takes up 5% of the vessel's tonnage for basic components and structural members, plus additional tonnage for the launchers. Each launch module consists of a launch chamber, ready-weapons magazine, connections to the main munition handling system and necessary controls. On larger ships multiple launch modules may be co-located to create a launch complex, although usually the missile capability of a ship is dispersed to avoid crippling damage to the main armament resulting from a single hit.

The cost and crew requirement of the IMS is based on its total tonnage including the handling system but excluding additional magazines. Each launch module takes up 10 tons and can deliver four missiles per round. The ready munitions chamber for each launcher holds 36 missiles; enough for nine additional salvoes.

Thus a launch module cut off from the rest of the ship can launch a total of 10 salvoes before running out of missiles. Munitions from a damaged launcher can be fed back into the handling system and sent to chambers that still have launch capability. Most ships that use an IMS have large missile magazines, usually behind armoured bulkheads deep within the hull.

Munition stowage in an IMS is more fully integrated than aboard ships with independent missile bays and turrets. Some weapons are held in ready-reserve and fed up the hoists as soon as the first salvoes are on their way. These are replaced with weapons held in the bulk stowage system, which take more time to make ready. In a protracted engagement the ready-reserve may be depleted faster than bulk stowage can replace but this would require a lot of weapons to be launched in a very short time. More commonly a fight is over before the ready-reserve is depleted and weapons are broken out of bulk stowage to bring the ready and ready-reserve magazines up to capacity. As a result of this efficiency, 20 missiles can be carried per ton of missile magazine connected to the IMS, rather than the usual 12.

An IMS needs four crewmembers to operate, plus an additional one per full 100 tons of the system. It costs MCr2 per ton and requires power equal to 10% of its tonnage. The system takes up 10% of the vessel's hardpoints plus one per launch module. Tonnage of the system is base tonnage plus that of the launch modules. IMS missile magazines are not counted towards total tonnage of the system.

WEAPON	TL	RANGE	POWER	DAMAGE	COST	TRAITS
Integrated Munition System	10	As weapon	10% of tonnage	Varies	MCr2 per ton	Smart

HEAVY ORDNANCE

Heavy ordnance is the term used for oversized missiles or torpedoes that are too large for standard turrets, bays or IMS. A heavy ordnance munition is twice the size of a standard torpedo and much larger than a typical ship-to-ship missile. The payloads carried by these monster missiles are sometimes referred to as 'one-hit ship-killers', although in practice they rarely achieve anything so dramatic. However, a hit from a heavy ordnance weapon can cause severe damage to almost any warship.

HEAVY ORDNANCE (CONTINUED)

Heavy ordnance weapons use a standard configuration, with variable propulsion and warhead loads. Those set for standoff fire are termed heavy missiles; those intended for a fast streak to the target are referred to as heavy torpedoes.

A heavy ordnance weapon is created by selecting one of the available packages that will determine its cost and characteristics. A long-range missile gives up warhead space for additional endurance. It is not much faster than the standard heavy missile but can maintain thrust for much longer. Like standard long-range missiles, salvo strength is not reduced every 5 rounds.

Heavy torpedoes have a maximum range of Medium and are designed to close extremely fast whilst making small evasive movements. This imposes DM-2 on any attempt to shoot down incoming torpedoes and the Effect of point defence against a salvo is halved, as is usual for torpedoes. The warhead is encased in a pre-fragmented jacket that protects it during impact on a direct hit, allowing detonation inside the target. The jacket becomes a hail of hardened fragments on a near-miss detonation, perforating the target rather than blasting it from inside.

Heavy ordnance cannot be launched from standard weapon mounts and requires an ordnance pod.

Configuration	TL	Thrust	Damage	Cost	Traits
Long-Range Missile	9	12	10D	MCr1.2	Smart
Standard Heavy Missile	8	10	12D	MCr1	Smart
Heavy Torpedo	8	10	16D	MCr1.5	Smart, AP 8

ORDNANCE POD

An ordnance pod is a disposable container/launcher for missiles, torpedoes or heavy ordnance. The pod mount consumes one ton and one hardpoint, and contains all necessary connections and electronics to operate the weapon. Pods cannot be used on small craft firmpoints. The mounting is a permanent fixture, although the pod itself is not. The pod is carried outside the hull armour, tucked into a recess until deployed and has a streamlined covering. This is ejected along with the weapon attachment points once fired, leaving just the pod mount to be refitted when the ship returns to port.

An ordnance pod does not consume tonnage but must be bought separately to the mount and cannot be used without one. The weapon mix must be specified in general terms (missile, torpedo, heavy ordnance) when the pod is bought. A pod can be reconfigured but this is a lengthy process and since the pod is disposable it is more common to simply buy a new one for each weapon mix. Torpedoes and missiles can be mixed in the same pod.

A pod has six spaces. A missile takes up one space, a torpedo three and a heavy ordnance weapon of any kind takes up all six. Thus a pod might be loaded with two torpedoes or one torpedo and three missiles. Any combination of the weapons in a pod, or all of them, can be launched in a single round. A pod mount consumes no power once its weapons are fired.

Weapon	TL	Power	Cost
Pod Mount	9	0	MCr0.5
Ordnance Pod	9	1	MCr0.25

TORPEDO PYLON

A torpedo pylon is a simple fixed mounting designed for use aboard small craft. It takes up one firmpoint and holds a single torpedo. A firmpoint mounting of this kind consumes no power and costs Cr100000. Tonnage is the same as for any other fixed mount: 0.1 tons. Torpedoes must be bought separately, at a cost of Cr150000 for a standard warhead.

Pylon mounts are inefficient for larger craft but are sometimes encountered. A pylon suitable for hardpoint mounting costs Cr100000 and holds two torpedoes.

STANDARDISED CRAFT DOCKING SYSTEM

Rather than the docking clamps used in most other regions, many Sword Worlds vessels use an integrated docking system capable of taking a range of craft providing they are designed to work with it. A standardised docking system can accommodate any combination of craft up to its maximum capacity or a single craft not designed to work with it. Thus a 1,000-ton standardised docking system can accommodate up to 1,000 tons of Sword Worlds craft or a single vessel of up to 1,000 tons.

Each standardised docking system carried by a vessel requires tonnage to accommodate its machinery and connections, equal to 5% of the tonnage of the largest craft that can be docked. In addition, the system consumes tonnage equal to 5% of the total tonnage that can be docked on it.

Thus a 10,000 ton ship with four docking systems, capable of carrying 500 tons of craft each, with a maximum size of 200 tons for any one craft, uses 35 tons per system, for a total of 140 tons. If the system was intended to accommodate 500-ton craft the minimum tonnage of each unit would be 50 tons. It would thus be necessary to use two systems of 1,000 tons capacity, maximum capability 500 tons in any one craft, rather than the four systems of the original design. Each system can only launch or dock one craft at a time.

A standardised docking system costs MCr0.1 per ton of the largest single craft that can be accommodated, plus MCr0.1 per ton of the system.

ORBITAL MINES

The Sword Worlds Confederation uses a variety of mine warfare techniques to impede enemies and harass their commerce. A minelaying cruiser can make wilderness refuelling hazardous by seeding gas giants or placing mines on approaches to inhabited worlds – and can tie down resources looking for mines it may or may not have laid. The mines used by the Sword Worlds are essentially disposable missile launchers with a basic detection and tracking system, although sometimes they are booby-trapped with a warhead inside the main casing. This can be a nasty surprise for vessels assigned to minesweeping or enterprising crews who try to steal a mine for resale.

Mines are of two general types; offensive and defensive. Defensive mines are intended to be controlled from a vessel or installation and have basic electronic systems of their own. They are capable of limited manoeuvre and constantly shift orbit to prevent clearance with kinetic-energy weapons (the 'throw a rock through the minefield' method), which also permits them to be clustered for a massed salvo or dispersed to make clearance operations more difficult. Offensive mines are intended to be laid and left to their own devices, usually moving in complex patrol and concealment patterns, and attacking vessels that do not send the correct codes when entering the minefield. All mines can receive a remote targeting feed, in which case they use the sensors of the supporting ship or installation unless their own are better.

Mines are built around a core containing basic drives, electronics and power storage. Mines have an internal capacity rated in spaces, much like ordnance pods. A standard missile takes up one space, a torpedo takes up three, and a heavy ordnance weapon takes up six, although only heavy mines can accommodate heavy ordnance. Mines can be recovered and reloaded.

A mine's duration assumes it undertakes normal manoeuvres for its type. One that lies inert other than orbital maintenance manoeuvres every few months can operate for five times its nominal duration. Mines laid in the upper atmosphere of a gas giant, where they can fire on ships refuelling there, reduce duration by 10% and those laid deep enough to be concealed from most scans have a maximum duration of around 1%. Specialist designs with greater power reserves are normally used for this application.

Mines are used in a variety of inventive ways. They can be launched on a ballistic course towards a world, activating as they reach orbital space to deliver a missile salvo at targets of opportunity or used to deliver a payload. For example, a force intending to begin assault operations might launch a cloud of cheap mines ahead of the assault force, which then deliver enormous amounts of radar-blocking chaff all at once. A similar technique is sometimes used to cover a retreat; minelaying vessels drop their payload across the path of pursuing vessels then make a run for it, drawing the enemy vanguard into an automated ambush.

Weapons launched from a mine have the same time-to-target and maximum range as those fired from warships.

Type 1 Defensive Mine: The Type 1 is the most basic mine used by the Sword Worlds Confederation. It consists of a very simple sensor and launch control system, plus sufficient high-capacity batteries for around 1,000 standard days' operation. This includes occasional low-power repositioning and orbit correction but no large-scale movements. The mine suffers DM-2 to detect and track targets using its own systems.

Type 2 Defensive Mine: The Type 2 is a much more capable mine, with a greater duration on-station and higher weapon capacity. Type 2 mines are used by most Confederation member worlds for defensive purposes.

Type 3 Heavy Defensive Mine: The Type 3 defensive mine is larger than a Type 2 and capable of launching heavy ordnance or a large salvo of smaller weapons.

Type 4 Offensive Mine: The Type 4 is an inexpensive offensive mine intended to be laid on short-term deployments as an area denial weapon. Its nominal duration is around 2,500 days but this is usually reduced by an aggressive auto-patrol pattern, by a factor of 3 or 4, so Type 4 minefields are normally considered to have a duration of less than one year on station.

Type 5 Long-Duration Offensive Mine: Type 5 mines are expensive, intended to be laid as part of a long-term strategy and can remain dormant, barely maintaining orbit, for 20 years or more. Once active, the mine will begin its patrol pattern and has a nominal duration of 5,000 days on-station. Mines of this sort are favoured for deep fields concealed in a gas giant's atmosphere.

Type 6 Heavy Offensive Mine: The Type 6 is the most expensive of those commonly encountered in the Sword Worlds. It can use heavy ordnance or standard weapons and has a duration equivalent to a Type 5.

Type 7 Electronic Warfare Drone: The Type 7 has little weapon capacity, although it may carry scatter rockets to disperse chaff and small countermeasures units. Instead, it has an enhanced electronics package granting DM+2 to detection and tracking tasks, and can hand off data to other mines. A Type 7 can assist up to 10 other mines in engaging a target at the same time. In addition, it can jam communications and sensor equipment, with DM+2. Duration is similar to a Type 5 and it is not uncommon to lay several of these drones to 'wake up' in sequence as the last one runs out of power, keeping watch as the 'fighting' mines remain dormant. Type 7 drones are used for monitoring as well as military purposes and sometimes dropped behind a retreating force to conduct electronic jamming, reducing the effectiveness of enemy fire as the force races for its jump point.

Scatter Rocket: Scatter rockets are cheap munitions used in place of missiles aboard some mines. Four rockets take up one space, allowing a mine to deliver a point-blank sucker punch against anyone tampering with it, or deliver various payloads. These include short duration, high power jammers and explosively dispersed chaff and marker incendiaries. The latter are not meant for combat but used to let an intruder know they have been spotted and draw the attention of nearby vessels. Marker incendiaries also have search and rescue applications and occasionally a 'mine' is put into orbit over a moon or rockball with scatter rockets filled with emergency equipment. This allows distressed personnel on the surface to be provided with equipment necessary to survival within minutes of sending the correct signal. A scatter rocket has a maximum range of Close and is unguided, doing 1D damage.

Minelaying System: Minelaying systems can be carried by any ship with hardpoints. A minelaying unit can deliver one mine per round and is capable of projecting mines at a modest velocity away from the ship without using their own thrusters. The system also includes a drone designed to retrieve mines for recharging or maintenance. Tonnage is for the system alone. Mine storage must be bought at the cost of Cr25000 per ton of mines to be carried.

A mine warfare unit is the equivalent of a small bay weapon, requiring 50 tons, 1 hardpoint and one gunner. It can lay all types of mine. A basic unit is available that consumes only 20 tons and a single hardpoint but cannot lay heavy mines or maintain mines of any kind. This unit is often used for seeding an area with short-duration mines at the outbreak of a conflict. Mine warfare units use the Gunner (capital) skill.

TYPE	COST	TONNAGE	CAPACITY	DURATION (DAYS)
Type 1 Defensive	Cr150000	1	3	1,000
Type 2 Defensive	Cr500000	2	8	2,000
Type 3 Heavy Defensive	MCr1	4	16	2,500
Type 4 Offensive	Cr600000	2	6	2,500
Type 5 Long-Duration Offensive	Cr900000	2	6	5,000
Type 6 Heavy Offensive	MCr1.2	4	14	5,000
Type 7 Electronic Warfare	Cr500000	2	1	5,000
Scatter Rocket	Cr10000	—	—	—

WEAPON	TL	TONNAGE	RANGE	POWER	DAMAGE	COST	TRAITS
Mine Warfare Unit	10	50	—	5	—	MCr15	—
Basic Minelaying Unit	10	20	—	2	—	MCr10	—

HIGHGUARD:
SMALL CRAFT

Small craft are generally designed to fit the 2-4-8 system, with standard fittings that allow them to be used aboard any Sword Worlds ship or installation. They are built to long-established designs and modified as required by their end users



GRIPEN AEROSPACE/CLOSE ORBIT INTERCEPTOR

The TL10 Gripen is designed to provide a measure of defence against incoming assault shuttles and similar craft. It is an unusual hybrid of starship and vehicle systems, creating a craft that can reach low orbit and engage enemies operating there but is intended to be ground-based and operated by planetary rather than space forces.

The Gripen has no internal gravity, since it is not intended to operate in space. It uses a minimal m-drive to nullify its mass, enabling the high burn thruster to produce an incredible rate of acceleration. So long as power remains, the m-drive can provide a little thrust, enabling an out-of-fuel Gripen to make an assisted glide home.

Primary armament is a single starship-grade torpedo carried on an external pylon, backed up by a pair of laser cannon. The laser cannon are vehicle-grade weapons and do little damage to a starship but are entirely sufficient to take on aircraft should the Gripen intercept them.



AEROSPACE/CLOSE ORBIT INTERCEPTOR

GRIPEN-CLASS

TL10		TONS	COST (MCr)
Hull	10 tons, Streamlined, Non-Gravity Aerofins	— 0.5	0.27 0.05
M-Drive	Thrust 0	0.05	0.1
High Burn Thruster	Thrust 10	2	0.4
High Efficiency Batteries	Power 40	1	0.1
Fuel Tanks	1.1 hour full thrust	2.75	—
Bridge	Single Cockpit	1.5	0.01
Computer	Computer/5	—	0.03
Sensors	Civilian	1	3
Weapons	Torpedo Pylon Light Laser Cannons x2	0.1 1	0.25 0.02
Software	Manoeuvre/0 Fire Control/1	— —	— 2

TOTAL: MCr 6.39

CREW

PILOT

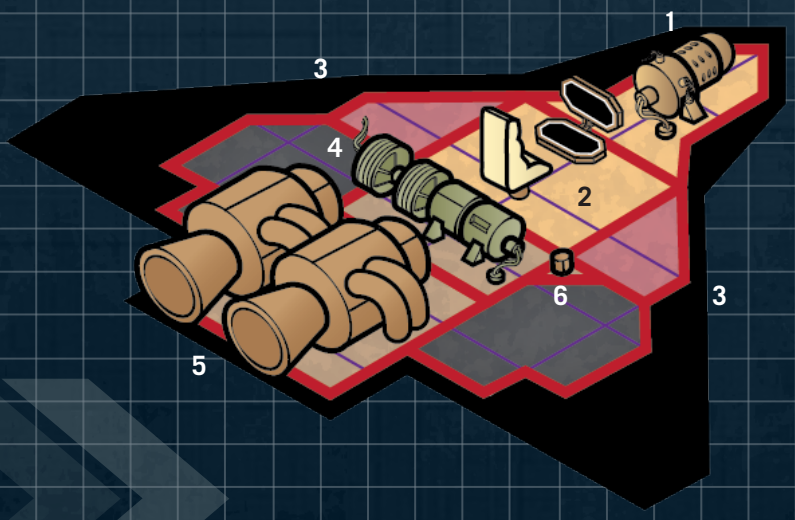
RUNNING COSTS

MAINTENANCE COST
Cr533/month

PURCHASE COST
MCr6.38

POWER REQUIREMENTS

0.25	2
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS
0	**1**
WEAPONS	SENSORS



LEGEND
1. Sensors
2. Cockpit
3. Laser Cannon
4. Batteries
5. Thrusters
6. Torpedo Pylon

TURUNMAA FIGHTER

The Turunmaa class is a standard light fighter used throughout the Sword Worlds. Twice the displacement of a typical light fighter, it is built with survivability and the possibility of upgrade or modification in mind. The craft has a two-seat tandem cockpit as standard, despite it normally flown by a single pilot. This allows the standard design to be used as a trainer or carry a specialist crewmember. Some operators put a fighter control officer in the lead craft of a flight; others fit additional electronic systems that require a second crewman.

The craft is heavily armoured and uses a reaction drive for additional manoeuvring capability or to boost for an intercept. Turunmaa fighters are considered supporting craft rather than serious combatants and usually encountered screening heavier combat vessels or conducting patrol operations to identify targets well clear of the parent vessel.



FIGHTER

TURUNMAA-CLASS

TL12		TONS	COST (MCr)
Hull	20 tons, Standard	—	1
Armour	Crystaliron, Armour: 8	2	0.4
M-Drive	Thrust 6	1.2	2.4
High Burn Thruster	Thrust 10	4	0.8
Power Plant	Fusion (TL12), Power 30	2	2
Fuel Tanks	4 weeks of operation	0.2	—
	1 hour full thrust	5	—
Bridge	Dual Cockpit	2.5	0.015
Computer	Computer/10	—	0.16
Sensors	Military	2	4.1
Weapons	Fixed Mount (pulse laser)	—	1.1
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Cargo		1	—

TOTAL: MCr 13.975

CREW

PILOT

RUNNING COSTS

MAINTENANCE COST
Cr1165/month

PURCHASE COST
MCr13.975

POWER REQUIREMENTS

12 MANOEUVRE DRIVE	4 BASIC SHIP SYSTEMS
3 WEAPONS	2 SENSORS



LEGEND
1. Fixed Mount
2. Sensors
3. Bridge
4. Cargo Hold
5. Air lock
6. Power Plant
7. High Burn Thruster
8. M-Drive

RAUMA UTILITY BOAT

The Rauma is ubiquitous throughout the Sword Worlds fleets, serving in a great variety of roles. Most are employed as personnel and light cargo shuttles, although the design is armed and lightly armoured, and will often see use as a transport for boarding parties or Patrol ground-operations units. The pulse laser is fitted on a small turret and considered a defensive weapon, although the Rauma is agile enough to outfly many civilian designs.

The craft requires only a single pilot but a dual cockpit is fitted as standard along with cabin space for crew comfort. Rauma boats are sometimes deployed as pickets for a parent vessel and can remain on-station much longer than a fighter could. This is not pleasant for the crews, nor for personnel who associate with them after a 16-hour picket deployment.

Costs given here are for a standard Rauma straight from the builders. Acceleration seats, electronic warfare outfits or mobile workshops are added by many users at additional cost.



UTILITY BOAT

RAUMA-CLASS

TL12		TONS	COST (MCr)
Hull	40 tons, Standard	—	2
Armour	Crystaliron, Armour: 4	2	4
M-Drive	Thrust 4	1.6	3.2
Power Plant	Fusion (TL12), Power 30	2	2
Fuel Tanks	4 weeks of operation	0.2	—
Bridge	Dual Cockpit	2.5	0.015
Computer	Computer/10	—	0.16
Sensors	Military	2	4.1
Weapons	Single Turret (pulse laser)	1	1.2
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Cabin Space		3	0.15
Cargo		25	—

TOTAL: MCr 18.825

CREW

PILOT

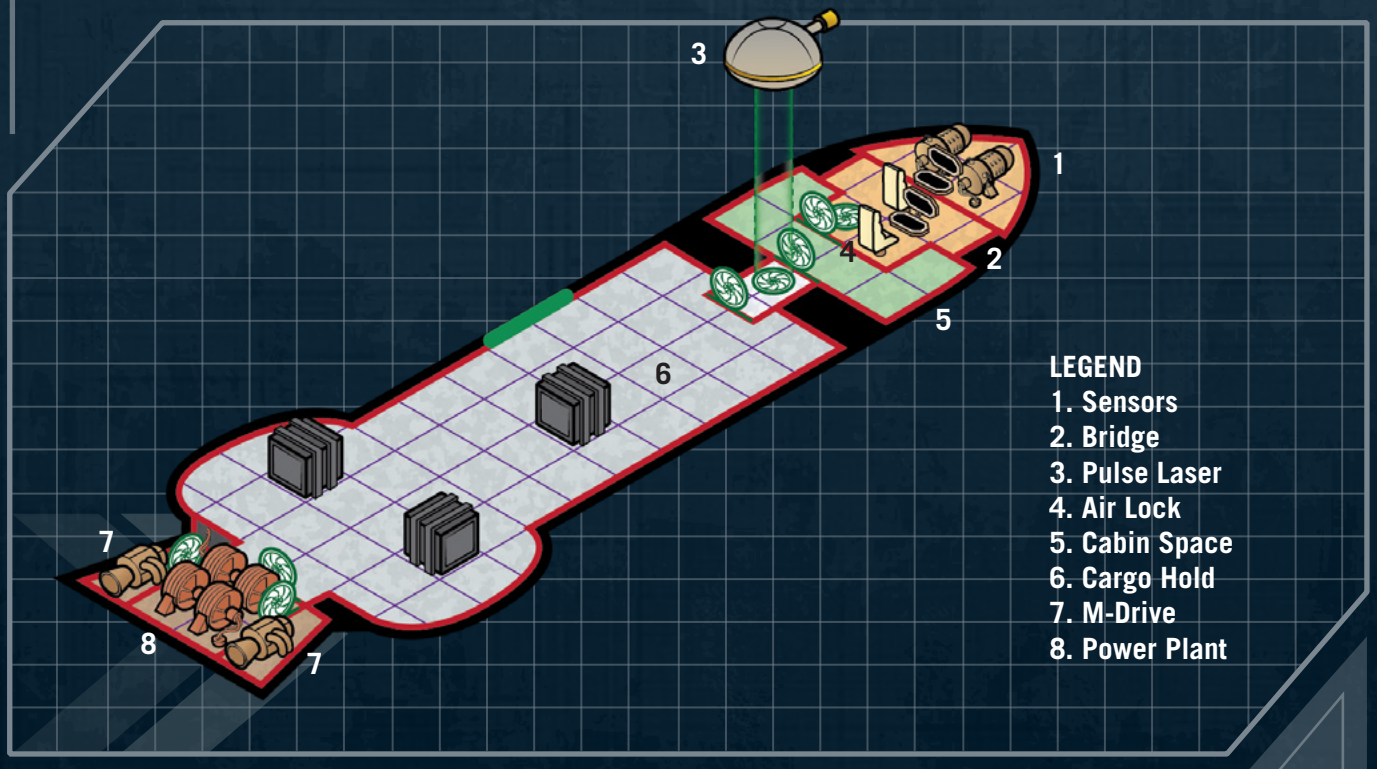
RUNNING COSTS

MAINTENANCE COST
Cr1569/month

PURCHASE COST
MCr18.825

POWER REQUIREMENTS

16	8
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS
4	**2**
WEAPONS	SENSORS



LEGEND
1. Sensors
2. Bridge
3. Pulse Laser
4. Air Lock
5. Cabin Space
6. Cargo Hold
7. M-Drive
8. Power Plant

TJELL SHUTTLE

The Tjell class is the commonest general-purpose shuttle in the Sword Worlds. Like its smaller cousin, the Rauma, it is lightly armoured and carries a pulse laser for self-defence. Huge numbers of these craft are also bought (either new or refurbished at the end of their military service) by civilian users. The weapon is sometimes, but by no means always, removed.

The Tjell can match a Rauma for performance and carry a great deal more cargo. It is more commonly encountered in this role than carrying passengers but variants fulfil all manner of roles. Many starports use the robust and reliable Tjell as a rescue craft or for maintenance tasks.



SHUTTLE

TJELL-CLASS

TL12		TONS	COST (MCr)
Hull	80 tons, Standard	—	4
Armour	Crystaliron, Armour: 4	4	8
M-Drive	Thrust 4	3.2	6.4
Power Plant	Fusion (TL12), Power 60	4	4
Fuel Tanks	4 weeks of operation	0.4	—
Bridge	Dual Cockpit	2.5	0.015
Computer	Computer/10	—	0.16
Sensors	Military	2	4.1
Weapons	Single Turret (pulse laser)	1	1.2
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Cabin Space		3	0.15
Cargo		60	—

TOTAL: MCr 22.825

CREW

PILOT

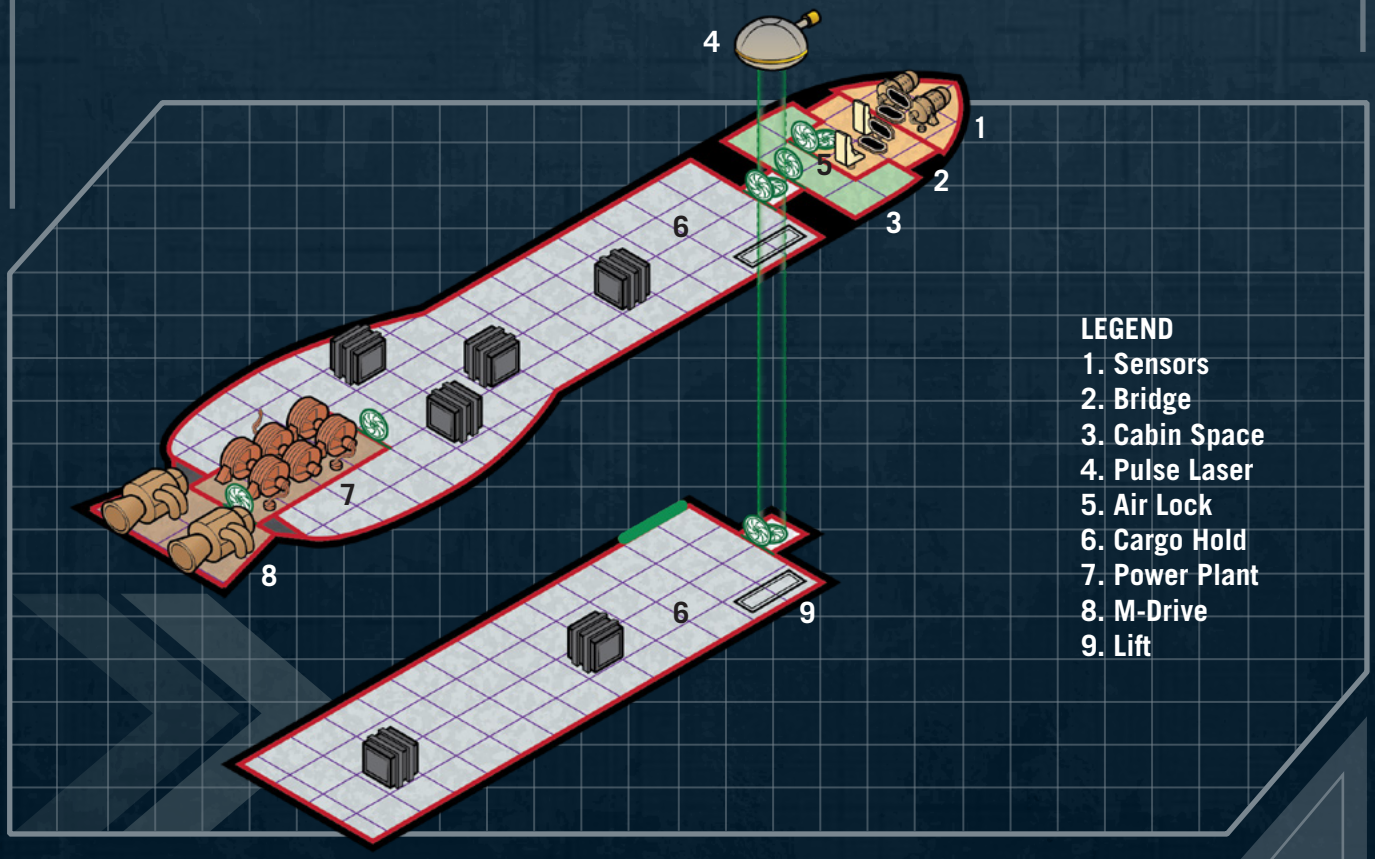
RUNNING COSTS

MAINTENANCE COST
Cr1902/month

PURCHASE COST
MCr22.825

POWER REQUIREMENTS

32	16
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS
4	**2**
WEAPONS	SENSORS



DRAUG TORPEDO BOAT

Rather grimly named for undead creatures in ancient Norse legends, the Draug is an expedient design developed by converting the standard Tjell design, resulting in a lot of 'wasted' internal space that is typically used for stowage. A much larger power plant and propulsion system, plus a second, thicker, layer of armour is added without altering the original design – indeed, many Draugs are converted from existing shuttles, which may be the reason for their undead-related name. As a result, the remaining internal space is inefficiently laid out and unsuitable for much more than general stowage.

The Draug is officially designated a large strike craft and equipped with a turreted pulse laser for self-defence, plus a torpedo launcher. A flight of Draugs will normally be escorted to the target by fighters but are capable of fighting their way through at need and can ignore many small craft-mounted weapons due to their heavy armour.



TORPEDO BOAT

DRAUG-CLASS

TL12		TONS	COST (MCr)
Hull	80 tons, Standard	—	4
Armour	Crystaliron, Armour: 12	12	2.4
M-Drive	Thrust 6	4.8	9.6
Power Plant	Fusion (TL12), Power 135	9	9
Fuel Tanks	4 weeks of operation	1	—
Bridge	Dual Cockpit	2.5	0.015
Computer	Computer/10	—	0.16
Sensors	Military	2	4.1
Weapons	Single Turret (pulse laser)	1	1.2
	Torpedo Barbette	5	3
Ammunition	Torpedo Storage (12 torpedoes)	4	—
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Cabin Space		3	0.15
Cargo		35	—

TOTAL: MCr 35.625

CREW

PILOT

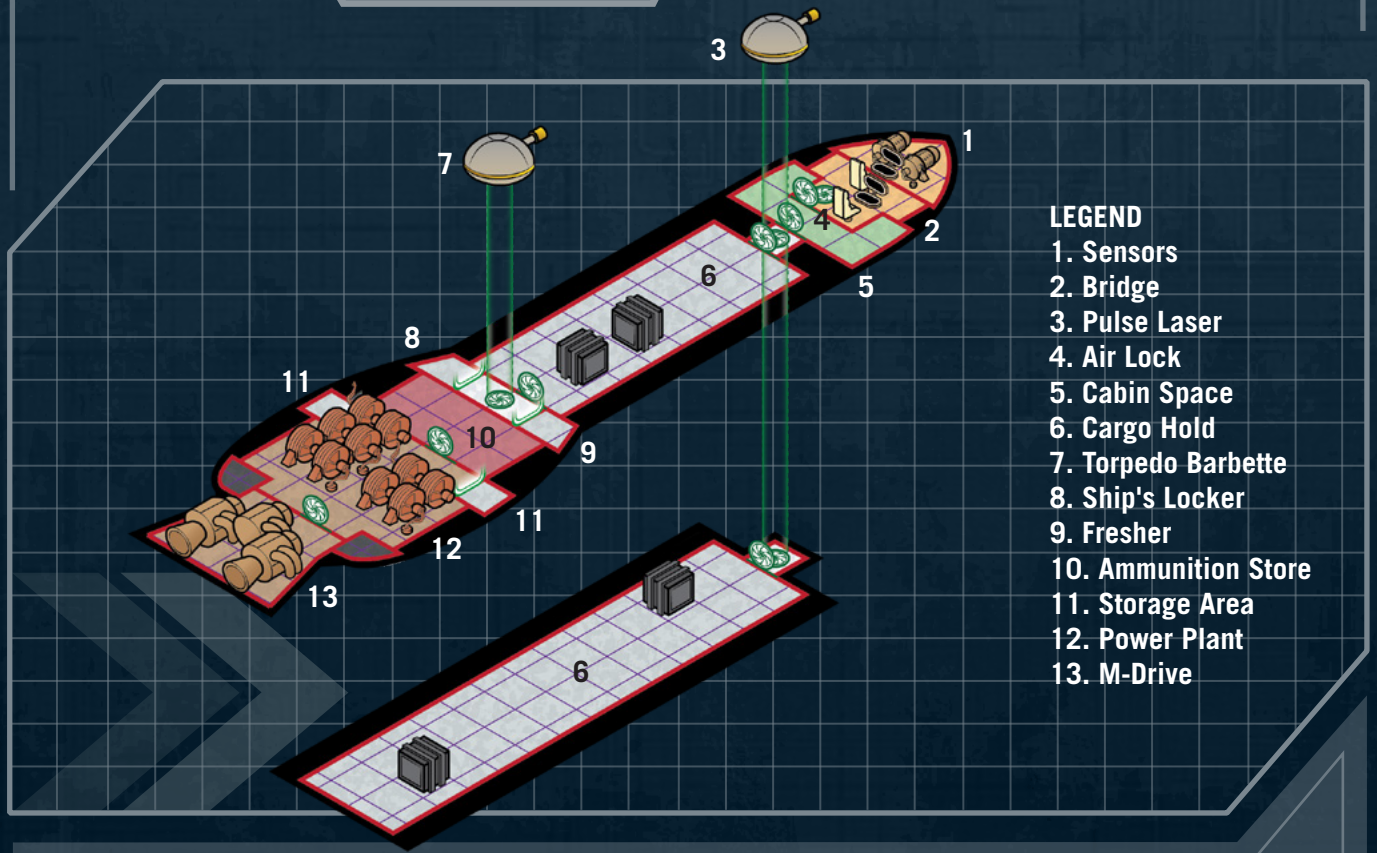
RUNNING COSTS

MAINTENANCE COST
Cr2945/month

PURCHASE COST
MCr35.625

POWER REQUIREMENTS

48	16
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS
6	**2**
WEAPONS	SENSORS



LEGEND
1. Sensors
2. Bridge
3. Pulse Laser
4. Air Lock
5. Cabin Space
6. Cargo Hold
7. Torpedo Barbette
8. Ship's Locker
9. Fresher
10. Ammunition Store
11. Storage Area
12. Power Plant
13. M-Drive

HIGHGUARD: SPACECRAFT

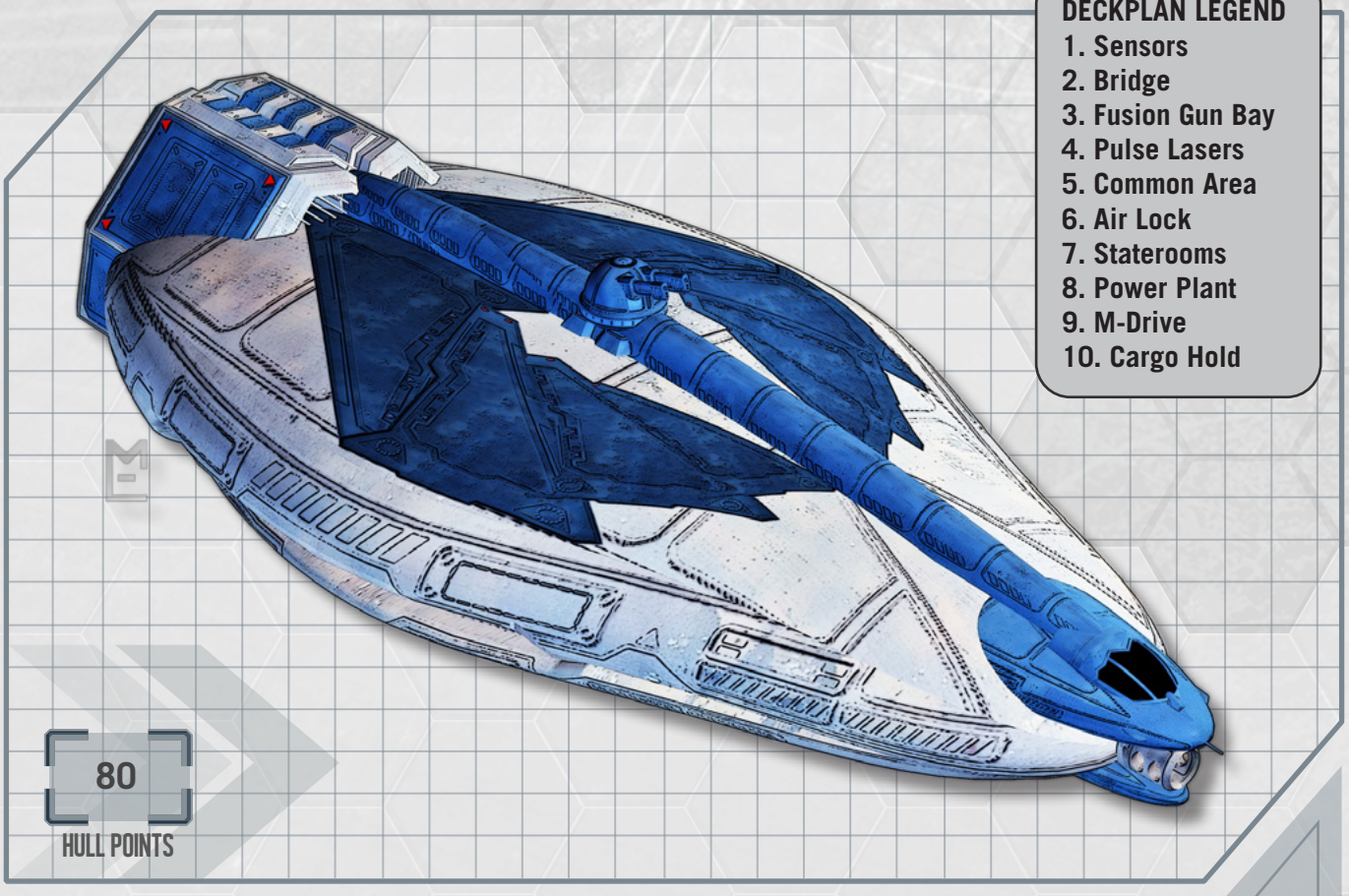
DRAKEN LIGHT STRIKE BOAT

The Draken is the commonest small, non-jump-capable combat vessel used by the Sword Worlds Confederation. The collective name for such craft is 'gunboat', although many are armed with missiles or torpedoes. Gunboats serve in the system defence boat role as well as being carried aboard tenders and carriers for offensive operations. Most are configured to fit into a standard handling system alongside other gunboats and small craft.

The vessel is a two-deck design built around a 50-ton weapons bay located in the centre of the hull. The bridge and flight systems are forward of the bay, engineering spaces and accommodation aft of it. A projection of the weapons bay lies beneath the bridge; on most craft this space holds the firing apparatus for the main weapon. A turret is also carried, usually mounting a dual laser for self-defence.

The majority of Drakens are armed with a fusion gun bay for the close-range strike role, although some operators prefer to substitute a torpedo bay instead. A modified version, with a missile bay instead of close-range weapons, is sometimes used for patrol work or to support and coordinate a squadron of Drakens armed with torpedoes or fusion guns.

Drakens are rarely employed far from a command or support vessel, or an installation, and are therefore often commanded by petty officers. A typical flotilla of four boats will be led by a junior officer aboard one of the craft, who usually also commands that boat, or controlled by an officer aboard the parent vessel. Small craft of this kind rarely operate autonomously but one that is expected to do so would usually be under the command of an officer. However, there is no provision for an officer's elevated status aboard the Draken and it is widely renowned as an enlisted man's vessel.



DECKPLAN LEGEND
1. Sensors
2. Bridge
3. Fusion Gun Bay
4. Pulse Lasers
5. Common Area
6. Air Lock
7. Staterooms
8. Power Plant
9. M-Drive
10. Cargo Hold

80
HULL POINTS

LIGHT STRIKE BOAT

DRAKEN-CLASS

TL12		TONS	COST (MCr)
Hull	200 tons, Standard	—	10
Armour	Crystaliron, Armour: 12	30	6
M-Drive	Thrust 6	12	24
Power Plant	Fusion (TL12), Power 240	16	16
Fuel Tanks	8 weeks of operation	4	—
Bridge		10	1
Computer	Computer/20	—	5
Sensors	Military	2	4.1
Weapons	Dual Turret (pulse lasers)	1	2.5
	Small Fusion Gun Bay	50	8
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Staterooms	Standard x4	16	2
Common Areas		8	0.8
Cargo		51	—

TOTAL: MCr 81.4

CREW

CAPTAIN, PILOT, ENGINEER, GUNNER

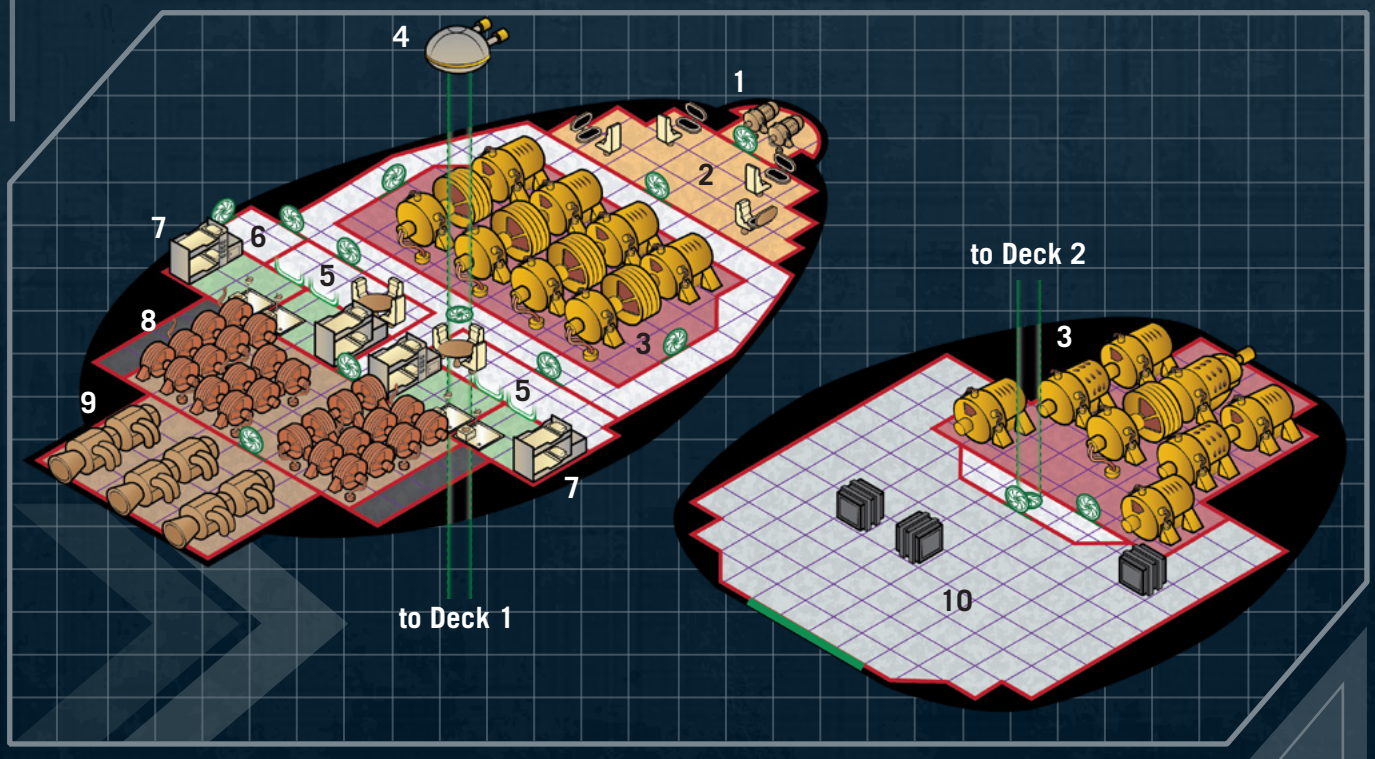
RUNNING COSTS

MAINTENANCE COST
Cr6783/month

PURCHASE COST
MCr81.4

POWER REQUIREMENTS

120	40
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS
59	**2**
WEAPONS	SENSORS



SOBJORNEN HEAVY GUNBOAT

Built on an 800-ton hull, the Sobjornen is heavily armoured but retains the considerable agility of its smaller cousins. Like the Draken, the Sobjornen can be carried on a standard docking system, although many ships cannot accommodate such large subordinate craft. More commonly, a Sobjornen will be encountered on solo patrol, as guardship for a small installation or as the command vessel of a flotilla of other gunboats. This class is almost always commanded by an officer, however junior, and has appropriate accommodation.

Armament is heavy, consisting of four medium bay weapons and four turrets or barbettes mounting lighter armament. Some operators favour missiles in the bays for a standoff strike; others torpedoes for closer ranged attacks. In recent years, however, the standard armament for new-build Sobjornens comprises medium particle accelerator bays, requiring an additional power plant close to the weapons. One way to tell a particle-armed Sobjornen from an older model is to look for a slight flaring amidships. The extended weapon/power plant bay requires a reconfigured bulkhead layout.

This design uses a heavy particle weapon fit for ship-to-ship combat with a secondary missile and pulse laser armament for escort and self-defence work. There is a modest amount of 'upgrade space' built into the design; depending on the user this may be turned into additional living or stowage space to facilitate long deployments or used to fit additional electronics systems.



HEAVY GUNBOAT

SOBJORNEN-CLASS

TL12		TONS	COST (MCr)
Hull	800 tons, Standard	—	40
Armour	Crystaliron, Armour: 12	120	24
M-Drive	Thrust 6	48	96
Power Plant	Fusion (TL12), Power 690	46	46
	Fusion (TL12) Power 180	12	12
Fuel Tanks	8 weeks of operation	14	—
Bridge		20	4
Computer	Computer/20	—	5
Sensors	Military	2	4.1
Weapons	Medium Particle Accelerator Bays x4	400	160
	Missile Barbettes x2	10	8
	Dual Turrets (pulse lasers) x2	2	5
Ammunition	Missile Magazine (120 missiles)	10	—
Systems	Repair Drones	8	1.6
	Additional Airlock	2	0.2
	Armoury	1	0.25
Software	Manoeuvre/0	—	—
	Fire Control/1	—	2
Staterooms	High	6	0.8
	Standard x12	48	6
Common Areas		24	2.4
Cargo		33	—

TOTAL: MCr 417.15

CREW

CAPTAIN, PILOT, ENGINEERS X3, GUNNERS X8

RUNNING COSTS

MAINTENANCE COST
Cr34763/month

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PURCHASE COST
MCr417.15

POWER REQUIREMENTS

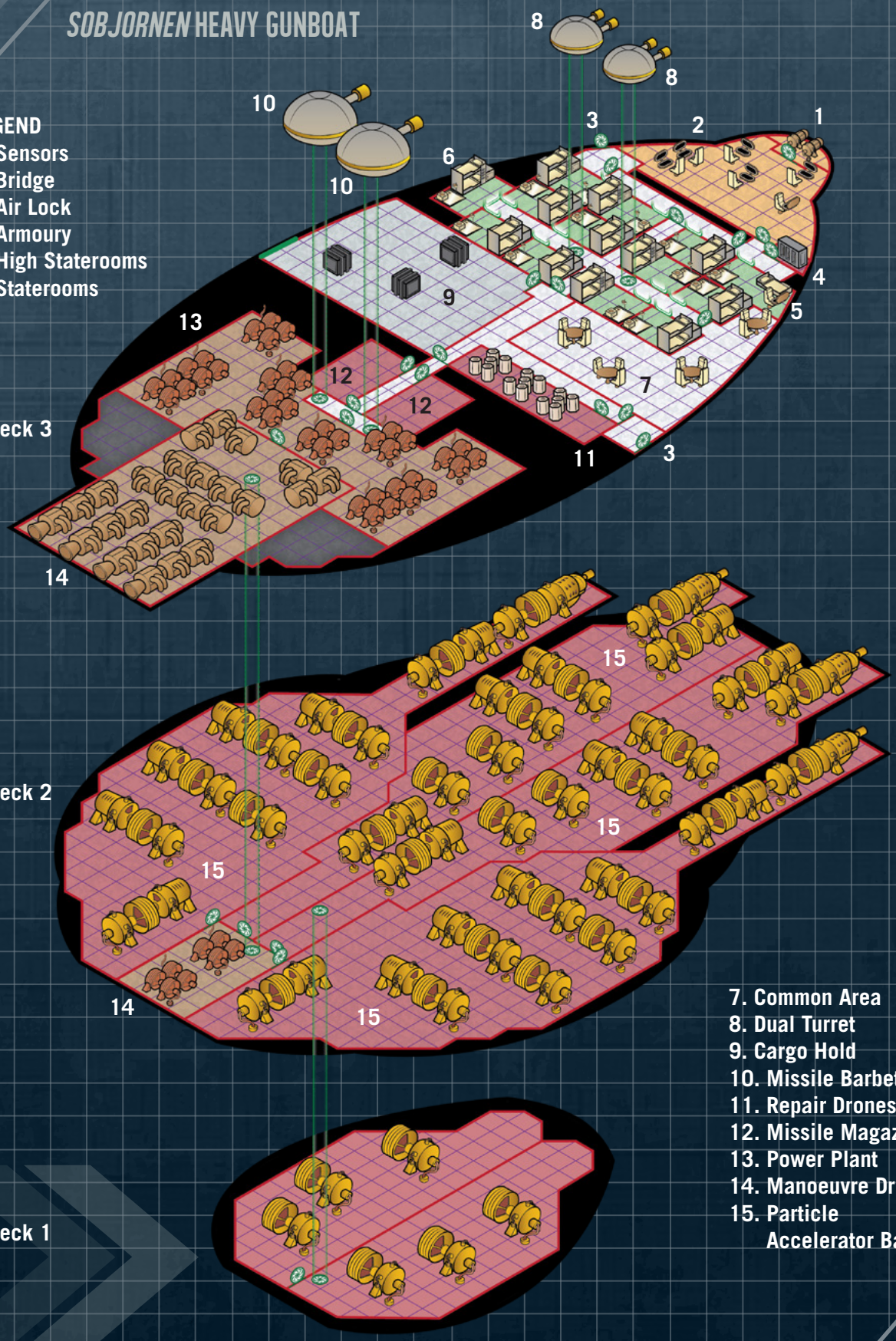
160
BASIC SHIP SYSTEMS

480
MANOEUVRE DRIVE

2
SENSORS

198
WEAPONS

SOBJORNEN HEAVY GUNBOAT



ILLERN ORBITAL DEFENCE PLATFORM

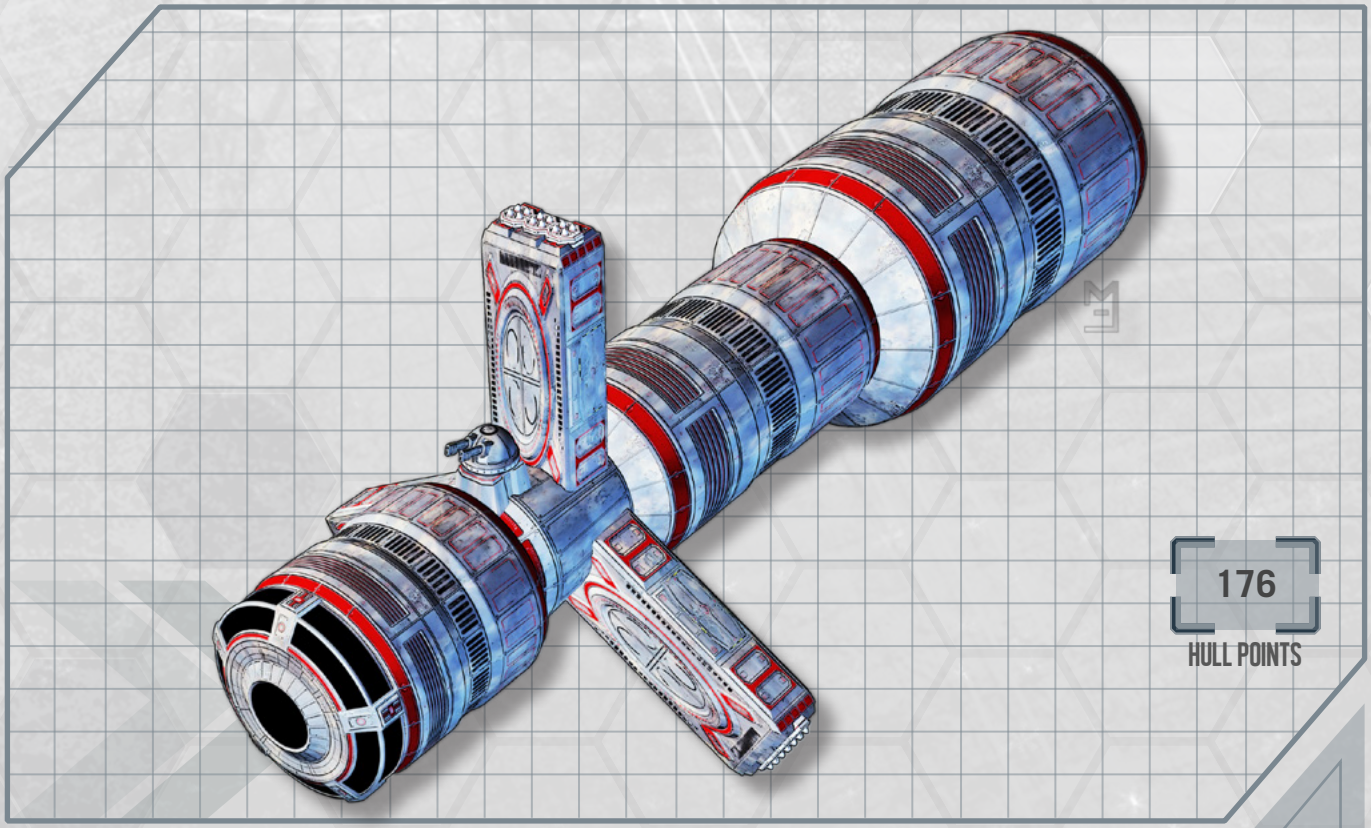
A variety of orbital defence platforms are in use throughout Sword Worlds space. The Illern class is typical, with similar installations built at several worlds in the Confederation. The hull is built as a series of cylindrical modules with access points between that can serve as internal seals in the event of a breach. The sternmost module contains living quarters and stowage for supplies, and is accessed from the docking system. This can accommodate a single vessel of up to 100 tons or any combination up to 100 tons of craft using the standardised docking system.

The next module contains the power plant and associated controls, as well as the station's manoeuvring system. This is not really a drive as such, although sufficient to allow the station to maintain orbit or change it gradually. It is standard practice for platforms to alter their orbit on what appears to be a random basis. In fact, the pattern is coordinated, making it much harder to eliminate a world's fortifications using kinetic ordnance whilst ensuring platforms do not endanger one another.

Forward of the power plant chamber is an access nexus, leading to the command centre of the station. A dual pulse laser turret is mounted at the fore end, although it is widely acknowledged that if orbital missile platforms are engaging enemy craft with lasers something is going badly wrong. The nexus also has three short tunnels, sealed by heavy hatches through armoured bulkheads, leading out of it at 60° angles to one another. These go into the missile chambers, each with its own armoured magazine.

The missile chambers are aligned at right angles to the main hull, radiating out from it at 60° intervals, requiring realignment when passing through the access nexus and for this reason it is kept at 0.1g under most conditions. Personnel trying to bound across the low-g access chamber almost invariably end up sprawling on the floor of the control or power plant room but neither this nor any amount of regulations seem to stop crews trying to master the technique.

Stations are normally commanded by a petty officer, with a group led by an officer aboard one of the platforms or a nearby major installation. A gunner is carried for each weapon system, plus two missile technicians and an engineer to look after the power plant. It is not uncommon for a small proportion of platforms in a defensive net to have a utility boat and its pilot semi-permanently assigned, or for a flight of fighters to be based out of one. This creates an uncomfortable level of overcrowding that is traditionally alleviated by missile crews slinging hammocks in the magazines.



ORBITAL DEFENCE PLATFORM

ILLERN-CLASS

TL10		TONS	COST (MCr)
Hull	400 tons, Close Structure	—	18
Armour	Crystaliron, Armour: 12	60	10.8
M-Drive	Thrust 0	1	1
Power Plant	Fusion (TL8), Power 150	15	7.5
Fuel Tanks	80 weeks of operation	40	—
Bridge		20	2
Computer	Computer/20	—	5
Sensors	Military	2	4.1
Weapons	Small Missile Bays x3	150	36
	Dual Turret (pulse laser)	1	2.5
Ammunition	Missile Storage (360 missiles)	30	—
Armoured Bulkheads	Missile Bays, Missile Storage	18	3.6
Systems	Standardised Docking System (100/100 tons)	10	11
	UNREP System (40 tons/hr)	2	1
Software	Manoeuvre/0	—	—
	Library	—	—
	Fire Control/1	—	2
	Launch Solution/2	—	12
Staterooms	Standard x8	32	4
Common Areas		12	1.2
Cargo		7	—

TOTAL: MCr 136.7

CREW

COMMANDER, ENGINEER, GUNNERS 4, MISSILE TECHNICIANS X2

RUNNING COSTS

MAINTENANCE COST
Cr11391/month

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PURCHASE COST
MCr136.7

POWER REQUIREMENTS

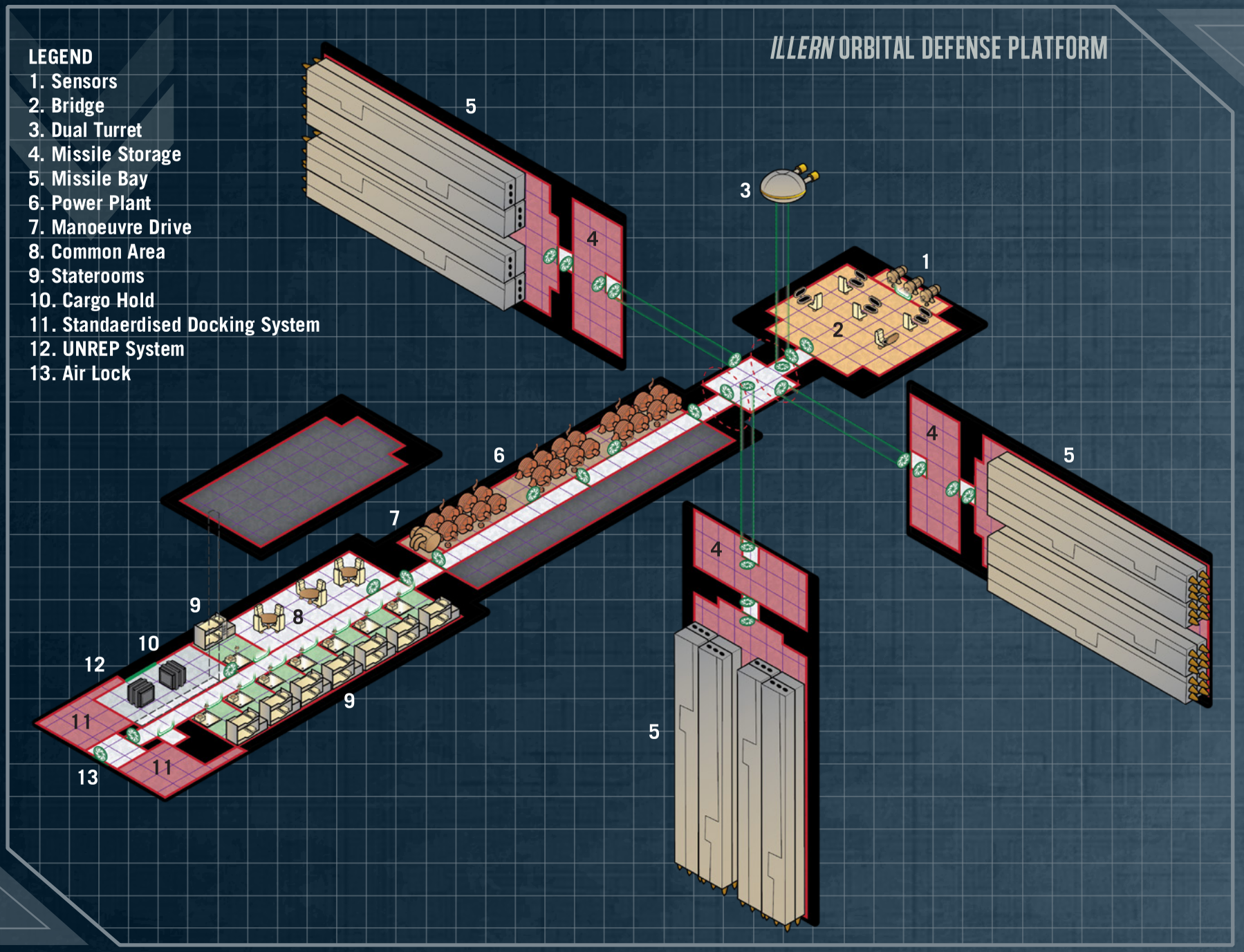
80
BASIC SHIP SYSTEMS

10
MANOEUVRE DRIVE

2
SENSORS

24
WEAPONS

ILLERN ORBITAL DEFENSE PLATFORM



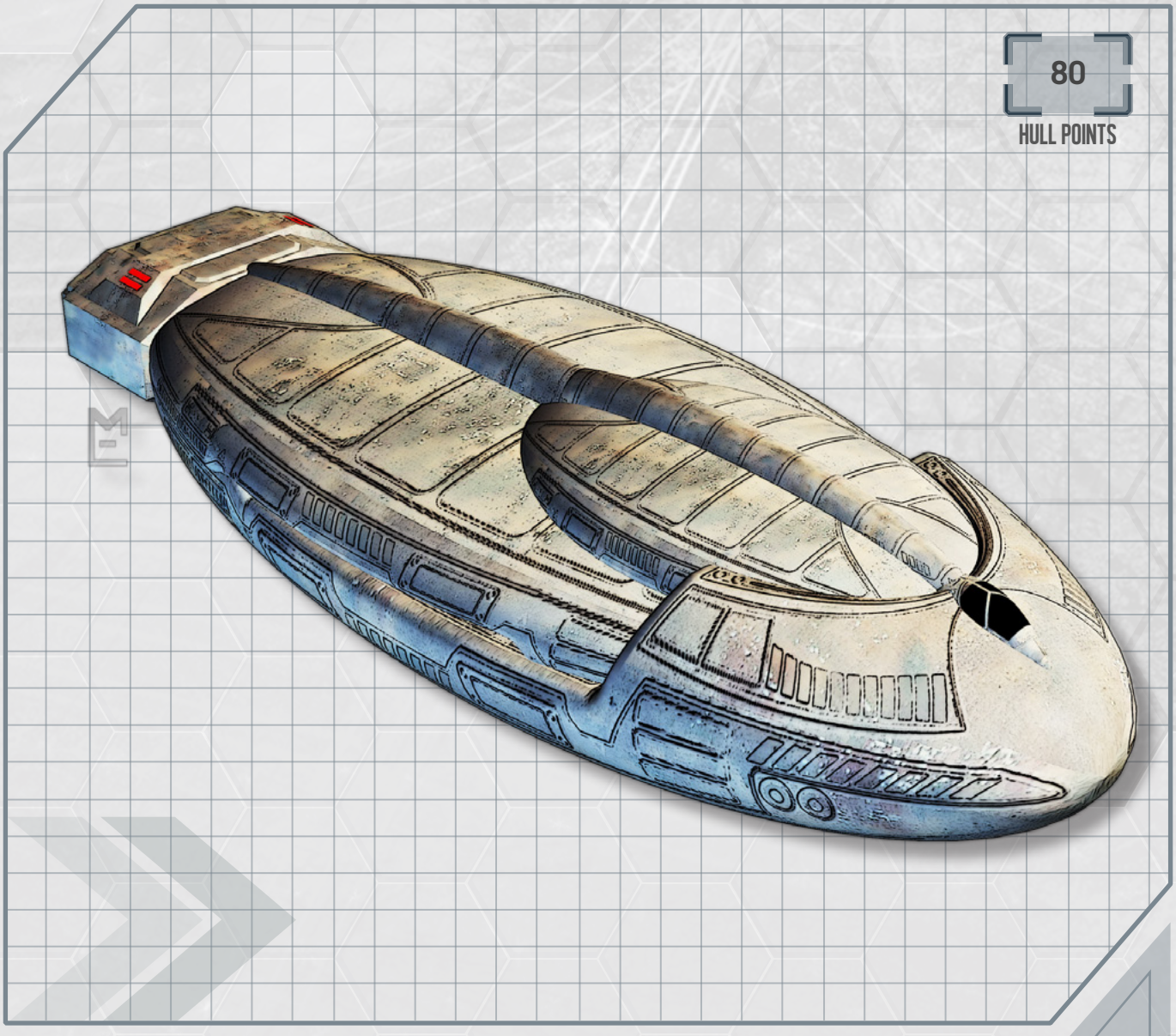
AHVEN LIGHT TRANSPORT

The Ahven is an example of what might be called 'big craft' – non-jump-capable vessels over 100 tons, designed to be carried aboard a parent vessel or operated out of an installation. It is designated a 'transport', a very general classification used without distinction regarding jump capability. The Ahven is compatible with the standardised docking system.

The Ahven class is a cargo hauler intended for short runs between ships or planetary installations. It can make a longer in-system transit but its endurance is limited by the fact that it has a cockpit rather than full bridge. The craft can be operated by a single pilot but usually carries a second crewmember capable of carrying out basic technical functions and assisting the pilot.

Crew fatigue is offset somewhat by the inclusion of a small crew space and single stateroom. On a run of more than a few hours it is common to carry a second pilot, allowing one to sleep or relax in the cabin area whilst the other is at the controls.

The Ahven is modest in performance but inexpensive and streamlined as standard. This enables it to act as a fuel shuttle for larger craft with only a few minor modifications. Weapons can also be fitted. This is uncommon on craft intended to operate out of starports within the Sword Worlds but a degree of self-protection is useful for craft carried aboard long-range trading vessels or warships.



LIGHT TRANSPORT

AHVEN-CLASS

TL12		TONS	COST (MCr)
Hull	200 tons, Streamlined	—	12
Armour	Crystaliron, Armour: 2	5	1.2
M-Drive	Thrust 2	4	8
Power Plant	Fusion (TL12), Power 90	6	6
Fuel Tanks	4 weeks of operation	0.6	—
Bridge	Dual Cockpit	2.5	0.015
Computer	Computer/5	—	0.03
Sensors	Civilian	1	3
Software	Library	—	—
	Manoeuvre/0	—	—
Staterooms	Cabin Space	6	0.3
	Standard	4	0.5
Cargo		164	—

TOTAL: MCr 31.045

CREW

PILOT

RUNNING COSTS

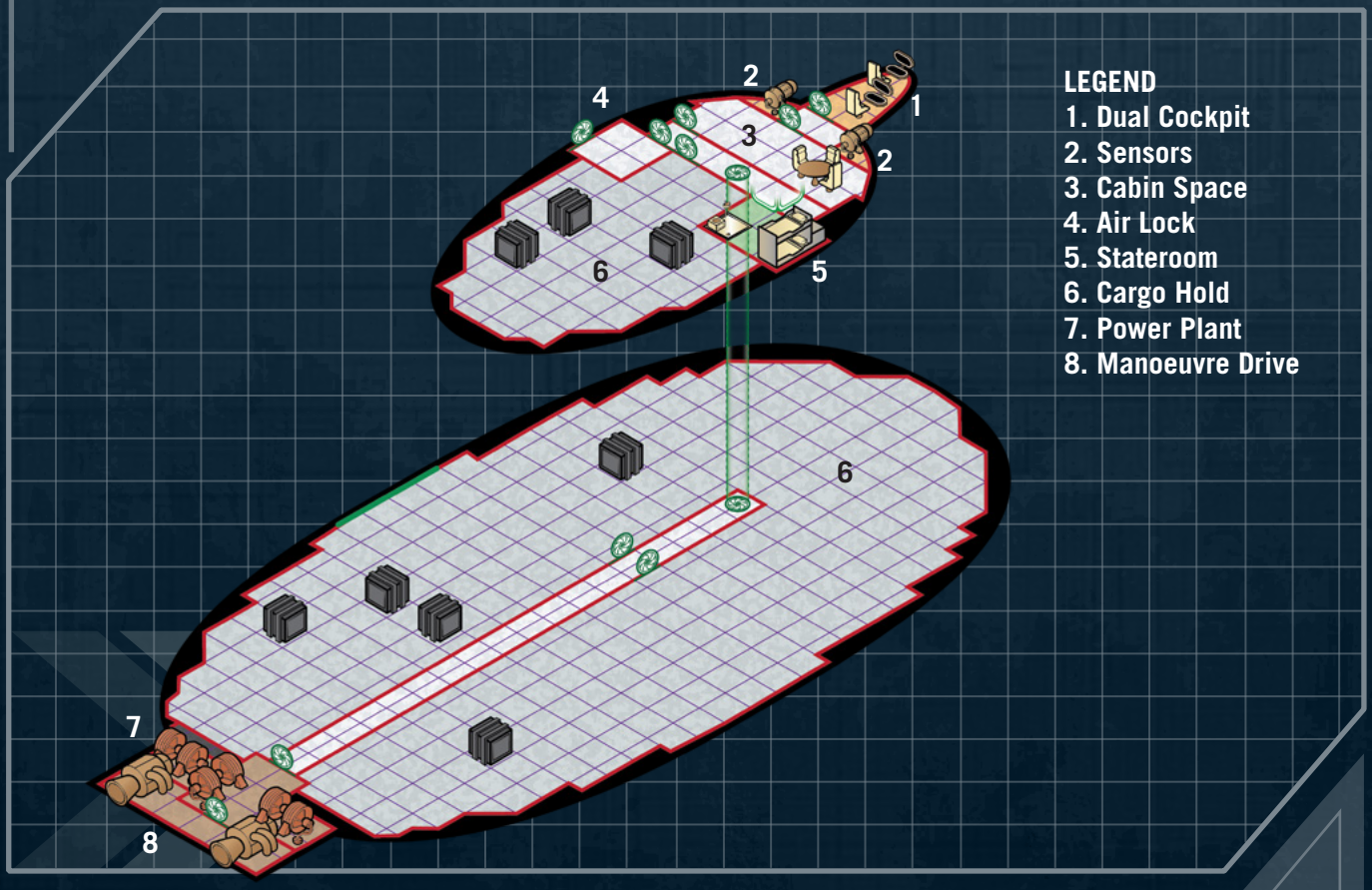
MAINTENANCE COST
Cr259/month

PURCHASE COST
MCr31.045

POWER REQUIREMENTS

40	40
MANOEUVRE DRIVE	BASIC SHIP SYSTEMS

1
SENSORS



LEGEND
1. Dual Cockpit
2. Sensors
3. Cabin Space
4. Air Lock
5. Stateroom
6. Cargo Hold
7. Power Plant
8. Manoeuvre Drive

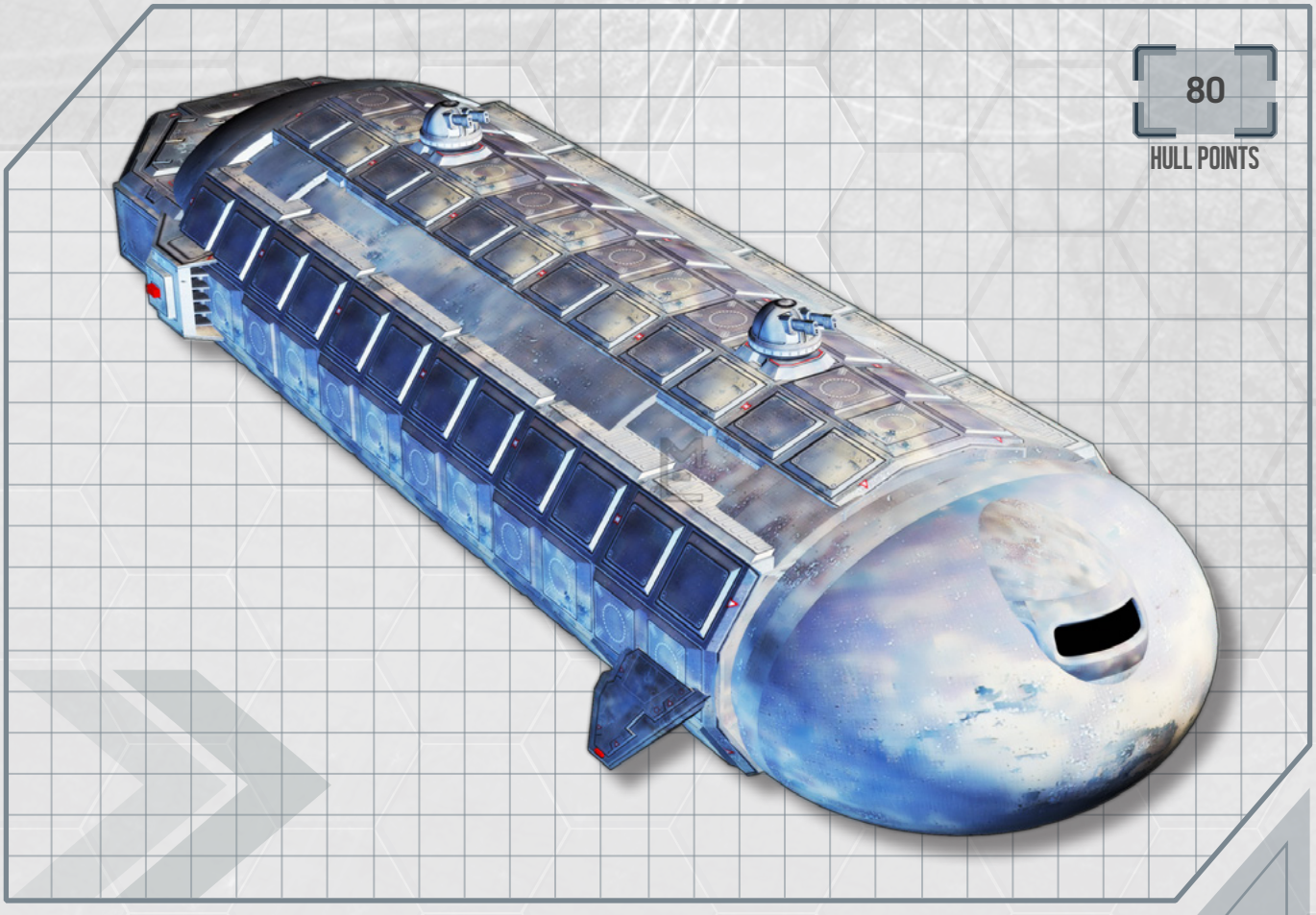
BRAXEN LIGHT COMMUNICATIONS VESSEL

The Braxen class fulfils some of the roles carried out by express boats and scout/couriers elsewhere, its primary purpose being to maintain near-constant communications between the worlds of the Confederation. A flotilla of Braxens, operated by the Interstellar branch of the Patrol, carries out routine mail delivery operations on a constant cycle through all the worlds of the Confederation. Even with some ships down for maintenance at any given time, this ensures there is never more than a day between official mail deliveries. It is widely supposed that some of these vessels are actually engaged in other work, hiding in plain sight among the standard mail-delivery ships.

Many more Braxens are used by the Confederation's armed forces as fleet couriers and message boats, with large numbers also in private hands, often converted by removing the mail array. The vessel's three-parsec jump range makes it expensive but is considered useful by explorers, time-sensitive couriers and smugglers. Surplus Braxens have a habit of turning up – often in suspiciously poor condition – for sale in areas very far from the Sword Worlds.

The Braxen is a typical blocky cylinder, built on two decks and compatible with the standardised docking system. Any vessel that can berth a 200-ton craft can accommodate a Braxen. The mail distribution array is located on the lower deck, immediately aft of the cargo hold. This was a design decision, intended to allow cargo capacity to be expanded by removing the array from vessels that did not need it. Even without the mail array cargo capacity is modest, at 22 tons with it and 32 without. This is sufficient for high-value cargo delivery and urgent deliveries but not viable on a commercial basis.

The upper deck contains a standard bridge, with a communications chamber immediately aft from which data transfers are supervised. On private ships this chamber often becomes an additional crew lounge, although vessels engaged in research or exploration may use it for mission-related equipment. Crew accommodation is excessive for such a small ship, since the Braxen is intended to carry out personnel transfers when operating in its official role. It is armed for self-defence, although not all private users retain the turrets.



LIGHT COMMUNICATIONS VESSEL

BRAXEN-CLASS

TL12		TONS	COST (MCr)
Hull	200 tons, Standard	—	10
M-Drive	Thrust 2	4	8
J-Drive	Jump-3	20	30
Power Plant	Fusion (TL12), Power 180	12	12
Fuel Tanks	Jump-3, 20 weeks of operation	66	—
Bridge		10	1
Computer	Computer/20	—	5
Sensors	Civilian	1	3
	Sensor Stations x2	2	1
Weapons	Dual Turrets (pulse lasers) x2	2	5
Systems	Fuel Processor (60 tons/day)	3	0.15
	Fuel Scoop	—	1
	Mail Distribution Array	10	20
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/3	—	0.3
	Fire Control/1	—	2
Staterooms	Standard x8	32	4
Common Areas		16	1.6
Cargo		22	—

TOTAL: MCr 104.05

CREW

PILOT, ASTROGATOR, ENGINEERS X2

RUNNING COSTS

MAINTENANCE COST
Cr8671/month

PURCHASE COST
MCr804.05

POWER REQUIREMENTS

40
BASIC SHIP SYSTEMS

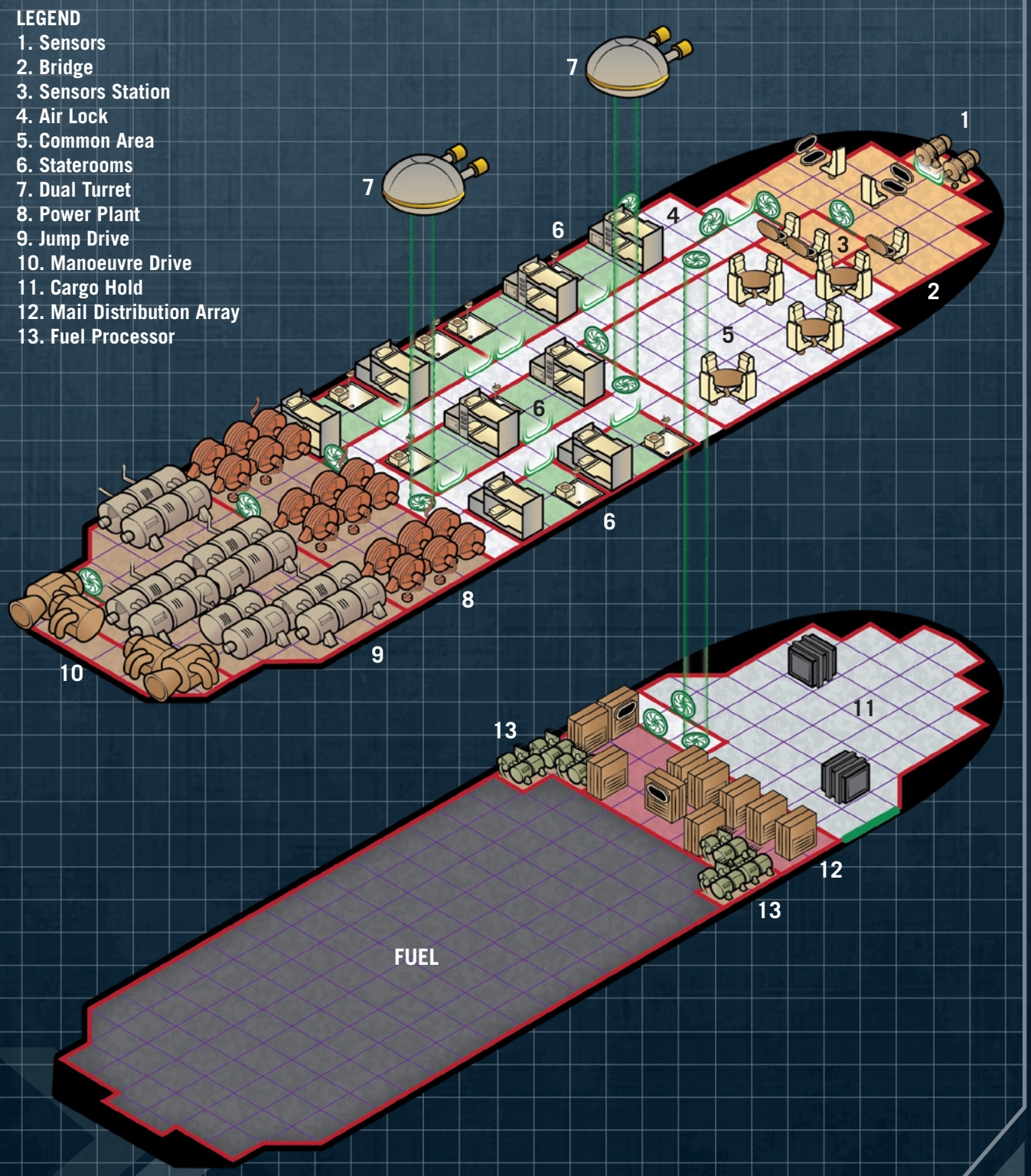
40
MANOEUVRE DRIVE

2
SENSORS

60
JUMP DRIVE

18
WEAPONS

BRAXEN LIGHT COMMUNICATIONS VESSEL



SAUKKO MEDIUM TRANSPORT

The Saukko was developed to suit the needs of the Patrol but is widely used by operators requiring a versatile and rugged vessel capable of taking care of itself. The Saukko is extremely inefficient as a trader or small freighter, as it loses a lot of potential cargo space to systems most operators find unnecessary. However, a Saukko can often be picked up cheaply at the end of its career with the Patrol. This, and the ruggedness of the vessel, is attractive for many potential buyers. It is common to find Saukkos converted to other roles, or with some of the specialist spaces turned into secure cargo areas or passenger accommodation. The intelligence services also use the ship to carry a variety of sensors and communications intercept equipment.

The design is a standard 'broad, rounded-off brick' with a slight flare aft around the drives. A three-deck layout is used, although most of decks 2 and 3 are taken up with a two-deck-high cargo bay. Internal compartmentalisation is higher than average, not least for security reasons. The bridge and living spaces are on the top deck; engineering and part of the cargo hold are on deck 2. Deck 3 contains the main cargo hold and a 'mission' space. Fuel is carried in heavily compartmentalised tanks wrapped around the main hull.

At the fore end of the upper deck is the oversized bridge. Along with the usual flight controls there is modest additional space for gunnery operations and control of a groundside team, rolling the functions of a briefing room into the bridge. The commanding officer of a Saukko can run a complex enforcement operation whilst retaining direct control of the ship, although this requires a good supporting staff. Immediately aft of the bridge is the captain's luxurious cabin and small 'common area' that serves as an open-plan office for the commanding officer or their staff. This whole area, comprising the bridge and 'captain's domain' is surrounded by a heavy armoured bulkhead.

Main accommodation lies immediately aft of this bulkhead, comprising 12 cabins plus a mess/common area and the main access shaft to the lower deck. Aft of this is another bulkheaded area, this time surrounding the ship's armoury and a small common space used for briefings or to get ready for a groundside operation and as a recreation space at other times. The ship's workshop is also in this area, primarily used for weapons maintenance but has equipment to allow captured devices and weapons to be dismantled and studied or examined for evidence.

The aft of the middle deck is taken up with the ship's power plant, jump drive and manoeuvre drive. This area can be accessed from the main shaft by authorised personnel or from the aft ready/recreation area using a floor/ceiling hatch. The fore of this deck is part of the main cargo bay.

The aft section of the lower deck has armoured bulkheads around it, primarily for internal security. It contains the aft airlock, brig, medical bay and a common area that sees use in many different circumstances. Depending on the ship's mission this might be an overflow for the medical bay, marshalling point for a ground operation or put to some other use entirely. On the other side of the heavy bulkhead is the cargo bay, which has an airlock equipped with forced linkage apparatus and a grappling arm.

Two of the four weapons turrets are on the dorsal surface. The other two are at deck 2 level on each side of the ship and have a small magazine associated with them, reloaded using the ship's cargo hoist and repurposed as a secure cargo area if necessary. The turrets are remotely controlled from the bridge but can be accessed using ladders up the side of the cargo bay.

It suits the purposes of the Patrol and the Confederation's intelligence services that the Saukko be ubiquitous. As a result many purchases are subsidised to around 10–15% of sale value. It is acknowledged that this class makes a good corsair, so care is taken to ensure only legitimate users get the subsidy – the Patrol does not want its ships used against it and the intelligence community wants to hide spy ships in plain site by mimicking legitimate Saukkos. One operating as a corsair draws unwelcome attention, a situation avoided wherever possible.

The Saukko's bulkhead layout is not optimised for ship-to-ship combat and provides protection only to the bridge and missile turrets. The rest of the bulkheads are for internal security – the armoury, command area and aft 'mission' chamber are miniature fortresses or prisons, depending on who controls the doors.



MEDIUM TRANSPORT

SAUKKO-CLASS

TL12		TONS	COST (MCr)
Hull	400 tons, Standard	—	20
Armour	Crystaliron, Armour: 4	20	4
M-Drive	Thrust 4	16	32
J-Drive	Jump-2	25	37.5
Power Plant	Fusion (TL12), Power 360	24	24
Fuel Tanks	Jump-2, 8 weeks of operation	86	—
Bridge		20	2
Computer	Computer/15	—	2
Sensors	Military	2	4.1
	Sensor Stations x4	4	2
Weapons	Dual Turrets (pulse lasers) x2	2	5
	Dual Turrets (missile racks) x2	2	4
Ammunition	Missile Storage (48 missiles)	4	—
Armoured Bulkheads	Special	10	2
Systems	Repair Drones	4	8
	Additional Airlock	2	0.2
	Brig (Capacity: 12)	8	0.5
	Briefing Room	4	0.5
	Cargo Crane	3	3
	Grappling Arm	2	1
	Forced Linkage Apparatus (TL9)	2	0.075
	Breaching Tube	3	3
	Armoury	4	1
	Medical Bay	4	2
	Workshop	6	0.9
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/2	—	0.2
	Fire Control/1	—	2
Staterooms	High	6	0.8
	Standard x16	64	8
Common Areas		48	4.8
Cargo		27	—

TOTAL: MCr 83.3

CREW

CAPTAIN, PILOT, ASTROGATOR, GUNNERS X4, ENGINEERS X2

RUNNING COSTS

MAINTENANCE COST
Cr6942/month

PURCHASE COST
MCr83.3

POWER REQUIREMENTS

80
BASIC SHIP SYSTEMS

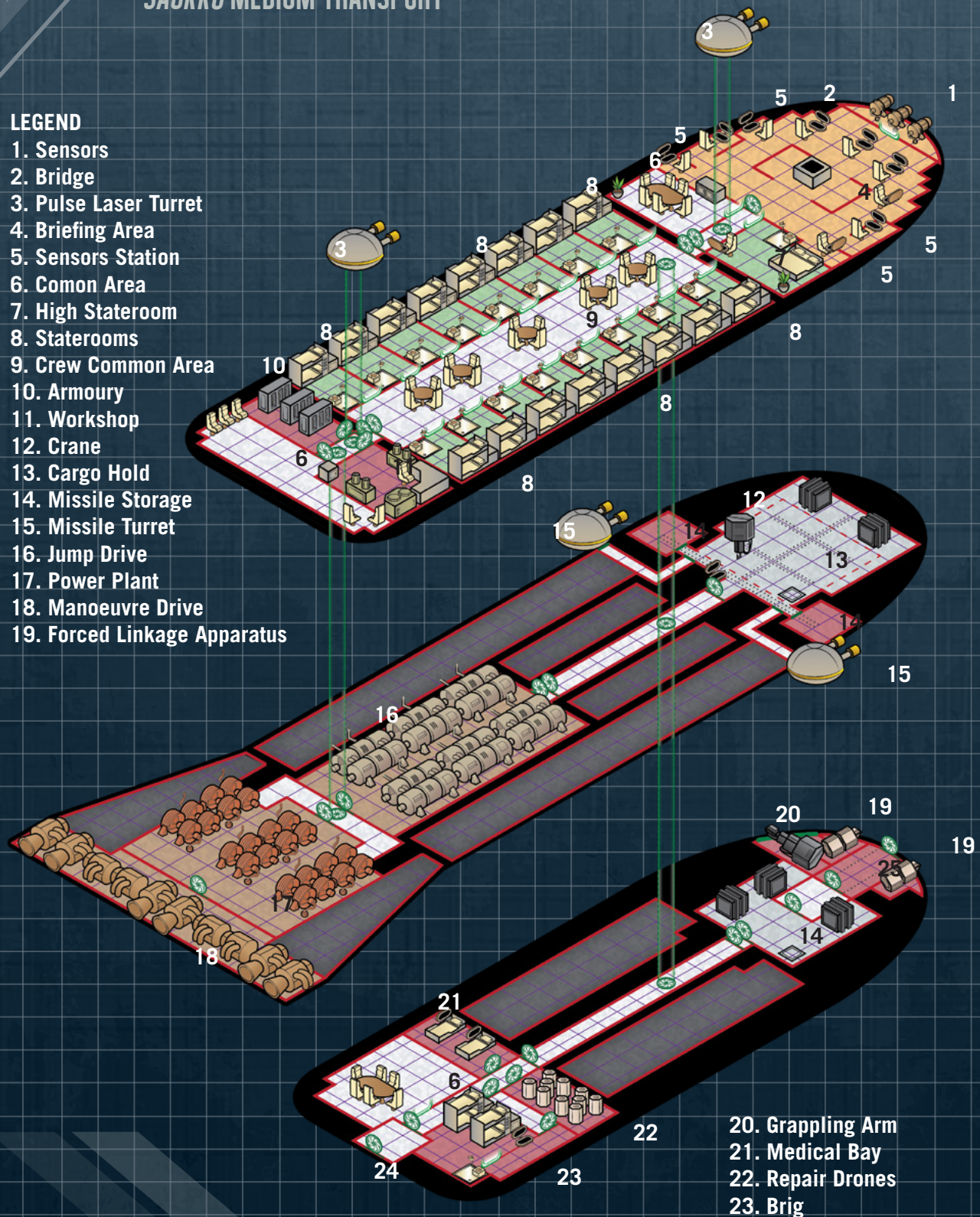
160
MANOEUVRE DRIVE

2
SENSORS

20
WEAPONS

160
HULL POINTS

SAUKKO MEDIUM TRANSPORT



LEGEND

1. Sensors
2. Bridge
3. Pulse Laser Turret
4. Briefing Area
5. Sensors Station
6. Comon Area
7. High Stateroom
8. Staterooms
9. Crew Common Area
10. Armoury
11. Workshop
12. Crane
13. Cargo Hold
14. Missile Storage
15. Missile Turret
16. Jump Drive
17. Power Plant
18. Manoeuvre Drive
19. Forced Linkage Apparatus
20. Grappling Arm
21. Medical Bay
22. Repair Drones
23. Brig
24. Airlock
25. Breaching Tube

HAVMANDEN LONG-RANGE TRADER

The Havmanden is a common design throughout and beyond the Sword Worlds. It is not intended to be the cheapest means of hauling cargo available but to be survivable during long trading cruises. Nor is it anything resembling fast but with the capability to make two consecutive jump-1 transits the Havmanden can reach almost any port sooner or later.

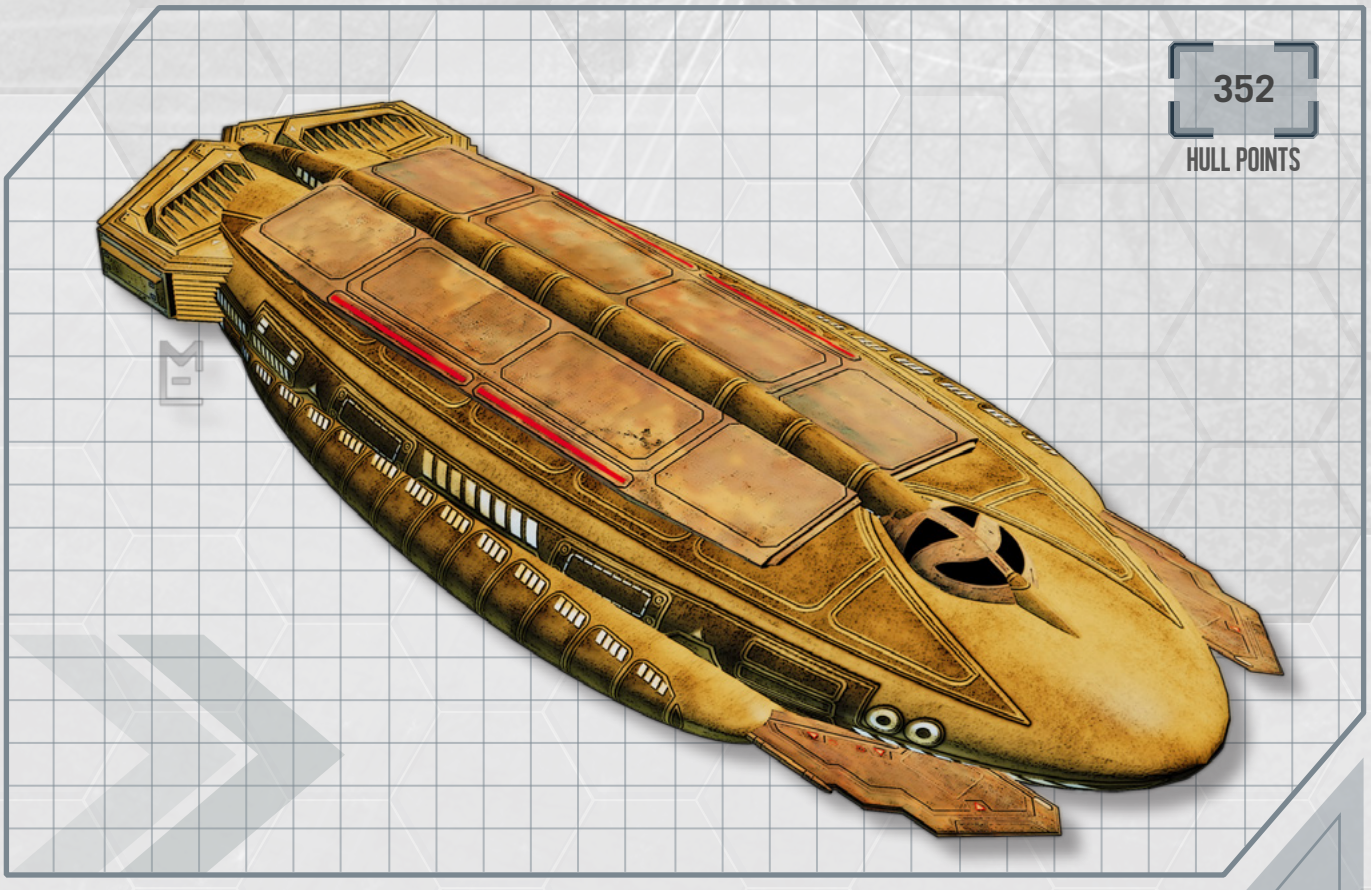
Vessels are supplied from the yards unarmed but most users fit at least token armament. A layer of light armour and a few guns gives this vessel a reasonable chance of getting itself out of trouble, which unfortunately encourages some operators to go looking for it. Havmandens are often found trading in areas where smaller and less well equipped vessels dare not go. This makes good economic sense but also results in frequent repair bills.

Like many similar vessels, the capacity for modification and upgrade are built in. The cargo hold can be partitioned to allow additional systems or accommodation to be added or cut away and replaced with a small craft docking system. Havmandens are sometimes encountered in the merchant-gunship-carrier role or delivering 200-ton gunboats to a new berth. Most commonly, however, they are found on the spaceways of the Confederation, unhurriedly plodding from one port to the next with a mixed cargo.

Configuration is a standard 3-deck layout, with the bridge at the fore end of the upper deck and luxurious senior officers' staterooms immediately aft of it. There is a small but well set up common area here, where the captain can entertain potential clients or buyers, or meet with favoured crewmembers to praise their good work. The crew lounge is on the other side of the main stateroom block and aft of that is the medical bay.

The drive and power plant chambers occupy the aft section of all the lower two decks, an arrangement that allows shipyard maintenance to be carried out on a modular basis but can be inconvenient for the vessel's engineering crew. To compensate, most ships carry one or two additional drive hands who also deal with routine maintenance, cargo handling and odd jobs around the ship. The forward part of the lower decks is given over to cargo space.

Not all operators consider the medical bay, workshop and armoury to be necessary but on a long trading cruise the ability to fabricate spares or repair components without seeking a friendly port can make the difference between a profitable cruise and an early return to port without covering fitting-out costs.



LONG RANGE TRADER

HAVMANDEN-CLASS

TL12		TONS	COST (MCr)
Hull	800 tons, Close Structure	—	36
Armour	Crystaliron, Armour: 2	20	3.6
M-Drive	Thrust 2	16	32
J-Drive	Jump-1	25	37.5
Power Plant	Fusion (TL12), Power 435	29	29
Fuel Tanks	Jump-1 x2, 12 weeks of operation	169	—
Bridge		20	4
Computer	Computer/15	—	2
Sensors	Civilian	1	3
Systems	Repair Drones	8	1.6
	Additional Airlock	2	0.2
	Cargo Crane	4	4
	Armoury	1	0.25
	Medical Bay	4	2
	Workshop	6	0.9
	Fuel Scoop	—	1
	Fuel Processor (100 tons/day)	5	0.25
	UNREP System (40 tons/hour)	2	1
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/1	—	0.1
Staterooms	High x2	12	1.6
	Standard x16	64	8
Common Areas		48	4.8
Cargo		363	—

TOTAL: MCr 170.8

CREW

CAPTAIN, PILOT, ASTROGATOR, ENGINEERS X2, MEDIC

RUNNING COSTS

MAINTENANCE COST
Cr14233/month

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PURCHASE COST
MCr804.05

POWER REQUIREMENTS

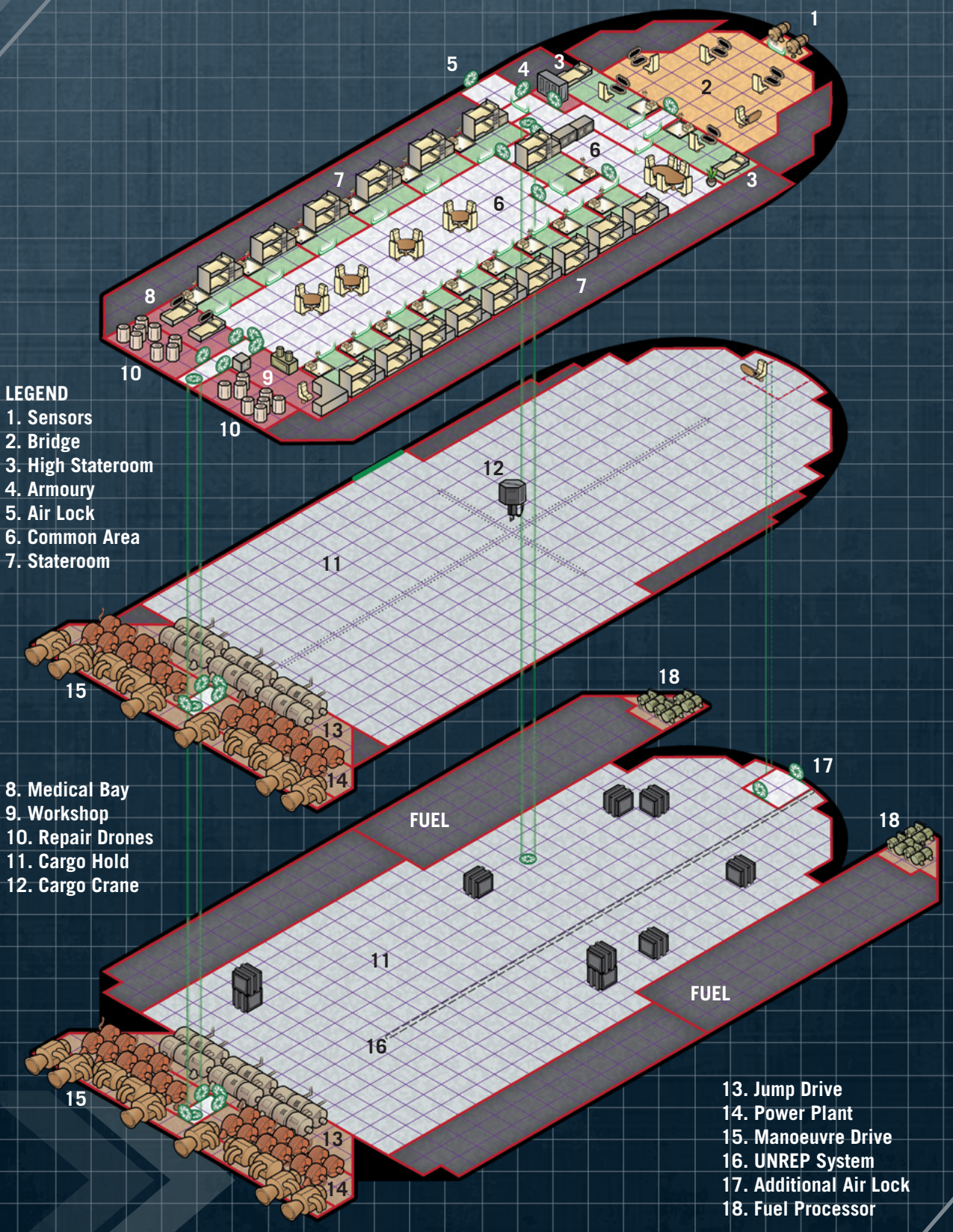
160
BASIC SHIP SYSTEMS

160
MANOEUVRE DRIVE

1
SENSORS

60
JUMP DRIVE

HAVMANDEN LONG-RANGE TRADER



LEGEND

1. Sensors
2. Bridge
3. High Stateroom
4. Armoury
5. Air Lock
6. Common Area
7. Stateroom
8. Medical Bay
9. Workshop
10. Repair Drones
11. Cargo Hold
12. Cargo Crane
13. Jump Drive
14. Power Plant
15. Manoeuvre Drive
16. UNREP System
17. Additional Air Lock
18. Fuel Processor

GLENTEN MINELAYING FRIGATE

Built on a 2,000-ton hull, the Glenten is intended to inexpensively fill the light patrol and escort role for many Sword Worlds navies and conduct minelaying operations as necessary. These are usually offensive; minefields laid in friendly territory are normally deployed and maintained by specialist vessels. A Glenten can cover the retreat of a task force by dropping mines in the path of pursuers or make gas giant refuelling hazardous for an enemy force, slowing an advance or retreat.

The Glenten is laid out as a central cylindrical hull containing critical systems, with a pair of blocky 'outriggers' attached to the main hull amidships and running aft. These contain missile bays and mine warfare systems, as well as all explosive ordnance. Each also has a standardised docking system capable of handling up to 80 tons of craft, so long as each craft is of 40 tons or less. The usual complement is four 40-ton utility boats and two on each outrigger but two 20-ton fighters can be substituted for each boat.

Secondary armament consists of three pairs of dual pulse laser turrets on the main hull, two pairs on the dorsal surface and one on the ventral face. Each outrigger has two dual pulse laser turrets on its outer surface, arranged as pairs with a sandcaster turret, so the fore and aft ends of the outriggers each have a sandcaster and a beam laser turret on the outer surface. The sandcasters have small dedicated magazines.

The arrangement of the outriggers is identical on each side. The docking system is at the fore end, leading into a cargo area that is often repurposed for other uses such as additional personnel accommodation. The mine warfare equipment and mine stowage is aft. Between them lie two small missile bays, each with a dedicated magazine; other missile-armed ships use an integrated munitions system but the Glenten is more compartmentalised. Each outrigger also has a fire control chamber that coordinates the weapons on that side of the ship, including mine-tracking operations.

The main hull is conventionally laid out on a single deck, with the bridge and officers' accommodation forward. The Glenten is not a prestigious command but her captain and first officer merit high staterooms. A small 'officers' country' with briefing facilities is immediately aft of the captain's quarters, with crew accommodation aft of that. The drive section lies between the rear parts of the outriggers, with power feeds running through the structural members holding them to the main hull.

The ship's hull and drive values include provision for 160 tons of small craft. If these are not to be carried, cargo or equipment pods can be shipped on the docking system, increasing the vessel's capacity. This is sometimes used to carry additional mines or missiles, or modular accommodation for a naval infantry force if the frigate is involved in a ground assault.



MINELAYING FRIGATE

GLENTEN-CLASS

TL12		TONS	COST (MCr)
Hull	2,000 tons, Close Structure	—	90
Armour	Crystaliron, Armour: 8	200	36
M-Drive	Thrust 4	80	160
J-Drive	Jump-2	105	157.5
Power Plant	Fusion (TL12), Power 1,365	91	91
Fuel Tanks	Jump-2, 8 weeks of operation	420	—
Bridge		60	10
Computer	Computer/20	—	5
Sensors	Military	2	4.1
	Sensor Stations x8	8	4
Weapons	Small Missile Bays x4	200	48
	Mine Warfare Units x2	100	30
	Dual Turrets (pulse lasers) x10	10	25
	Dual Turrets (sandcasters) x4	4	4
Ammunition	Missile Storage (288 missiles)	24	—
	Sandcaster Storage (80 canisters)	4	—
	Mine Storage	240	6
Craft	Standardised Docking Systems (40/80) x2	172	9.2
Systems	Repair Drones	20	4
	Brig (Capacity 12)	8	0.5
	Briefing Room	4	0.5
	Armoury	4	1
	Medical Bay	8	4
	UNREP System (120 tons/hour)	6	3
	Workshop	6	0.15
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/2	—	0.2
	Fire Control/1	—	2
Staterooms	High x2	12	1.6
	Standard x32	128	16
Common Areas		60	6
Cargo		24	—

TOTAL: MCr 788.75

CREW

CAPTAIN, PILOT X3, ASTROGATOR, ADMIN X2 MAINTENANCE X4 ENGINEERS X8, MEDIC, GUNNERS X25

RUNNING COSTS

MAINTENANCE COST
Cr65730/month

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PURCHASE COST
MCr788.75

POWER REQUIREMENTS

400 MANOEUVRE DRIVE

400 BASIC SHIP SYSTEMS

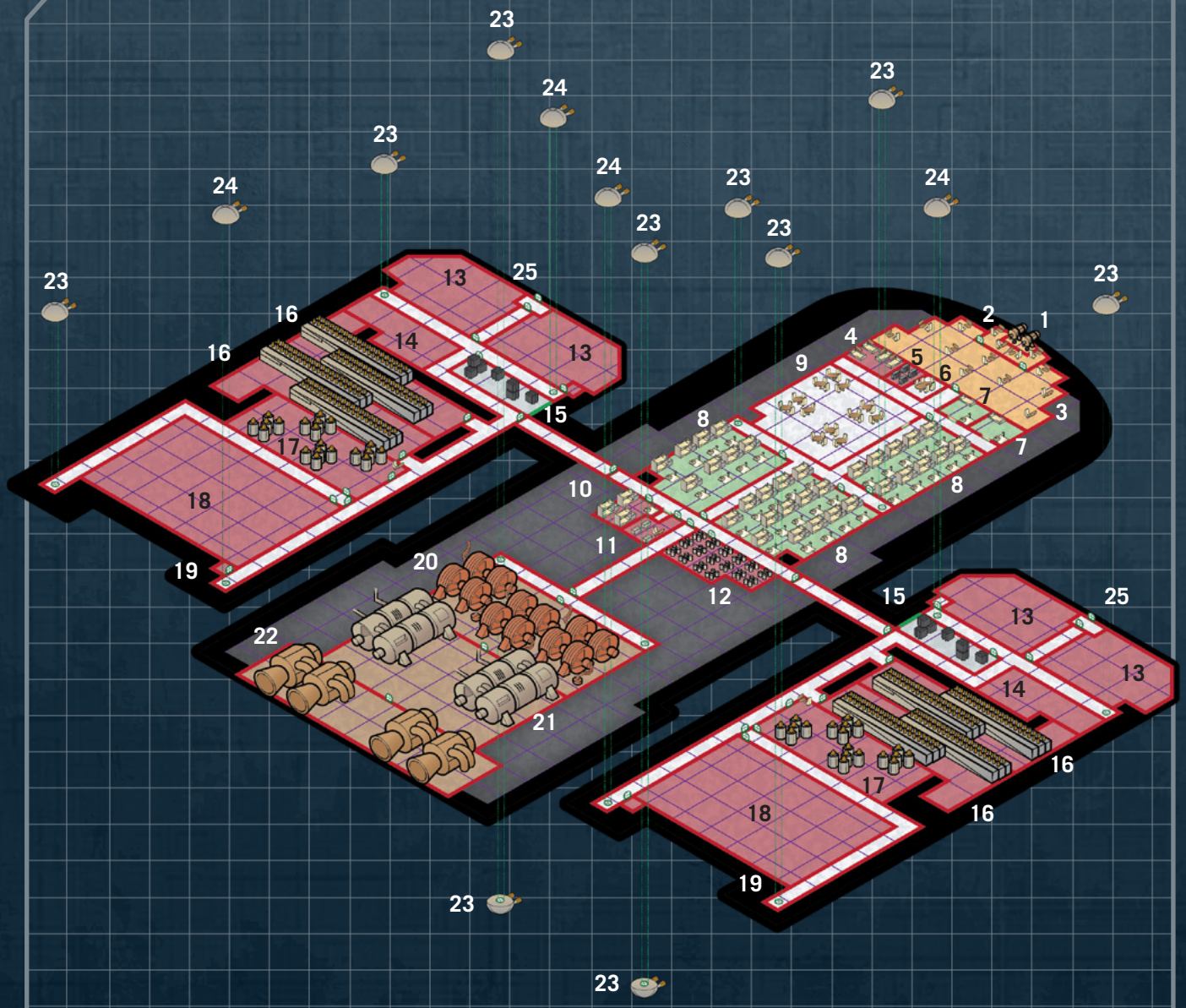
400 JUMP DRIVE

2 SENSORS

142 WEAPONS

GLENTEN MINELAYING FRIGATE

1 SQUARE = 5 TONS



LEGEND

1. Sensors
2. Sensors Station
3. Bridge
4. Medical Bay
5. Armoury
6. Briefing Room
7. High Stateroom
8. Stateroom
9. Common Area
10. Brig
11. Workshop
12. Repair Drones
13. Standardised Docking System x2
14. Missile Storage
15. Cargo Hold with UNREP System
16. Small Missile Bay x4
17. Mine Warfare Unit x2
18. Mine Strorage
19. Sandcaster Storage
20. Power Plant
21. Jump Drive
22. Manoeuvre Drive
23. Pulse Lasers Turret x10
24. Sandcasters Turret x4
25. Air Lock

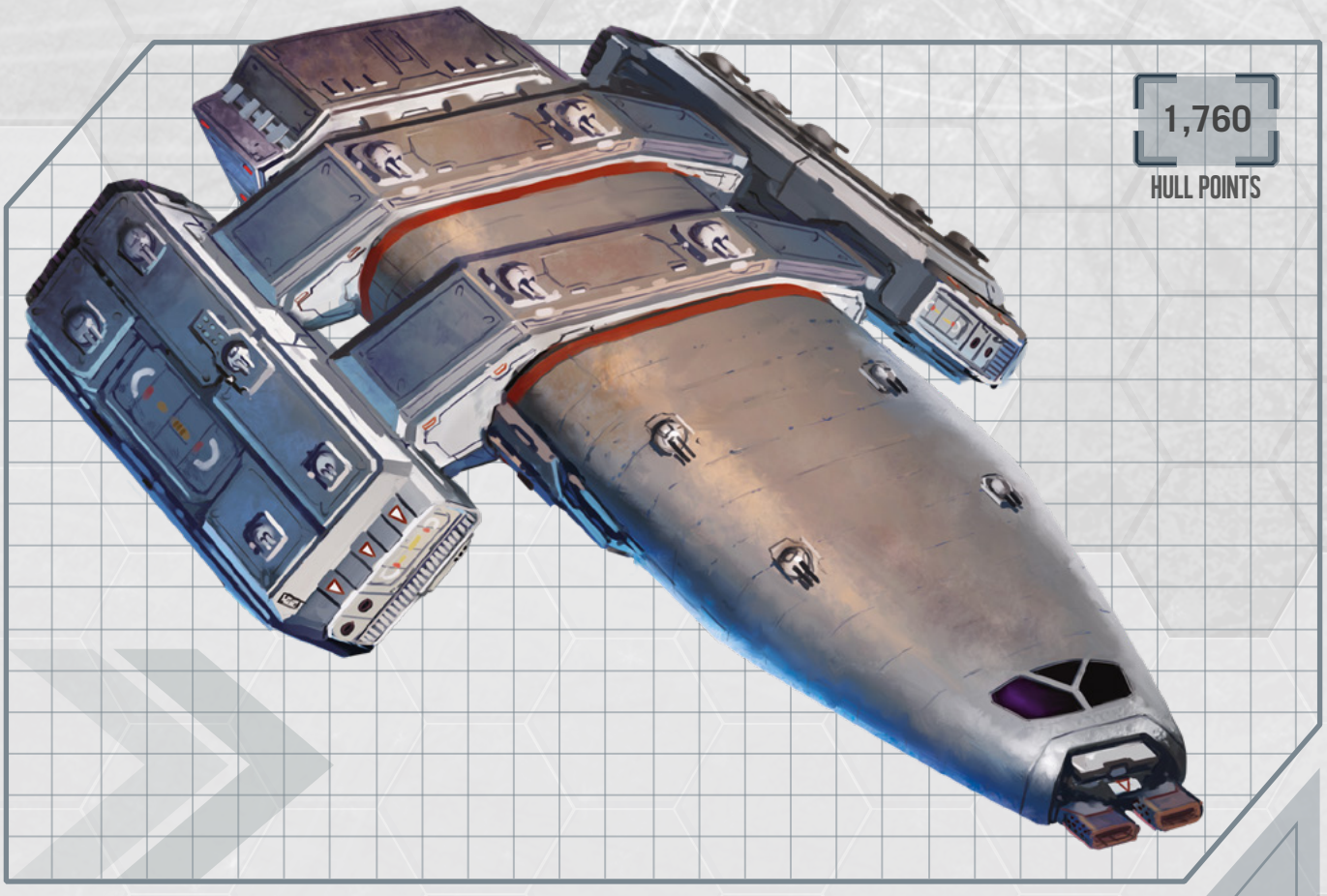
ORNEN STRIKE DESTROYER

The Ornen class is a strike vessel intended to close rapidly with a target, hit hard and retreat fast. It is heavily armoured and can shrug off most turret-mounted weapons but cannot withstand the fire of a vessel its own size for long. Not that it is intended to; the Ornen focuses on smothering the target in heavy firepower and putting it out of action. To that end, its armament - and indeed whole design – is built around a pair of fusion gun bays.

Like the Glenten, the Ornen uses a hull-and-outriggers configuration, with the four torpedo bays carried on short outriggers. These also house the docking system, which can carry up to 80 tons of craft on each outrigger providing no craft is larger than 40 tons. Standard complement is two 40-ton utility boats on each outrigger. Power generation is more than sufficient to run the ship's systems and weapons but the jump drive cannot be operated whilst everything else is active. To solve this problem the Ornen carries a set of high-capacity batteries sufficient to energise the jump drive without drawing power from other systems. Five tons of batteries are carried in each outrigger, also giving an emergency power reserve if connections are severed to the main hull. The remainder of the batteries are located close to the jump drive in the main hull.

The main hull has a large fusion gun bay at the fore end of the lower deck, firing forward and to the sides. The remainder of this deck is largely given over to fuel tanks, with the lower part of the engineering section at the rear. The upper deck follows the usual bridge and officers' country forward configuration, with crew accommodation in the centre and engineering aft. As a prestigious command, the Ornen has luxury accommodation for six of her officers, whilst most of the crew have a cabin of their own.

Ornens have virtually no long-range fire capability other than their battery of pulse lasers. In a fleet action they rely on the cover of missile-armed ships or their own speed and agility to get into firing range. The usual tactic is a fast close-range pass, rolling the ship to keep the fusion guns on target, with a heavy torpedo salvo fired into hull breaches caused by the fusion guns. A few variant vessels have been refitted with missile bays instead of torpedoes, creating a more balanced armament that excels nowhere but can choose whether or not to make an aggressive pass. A sure way to start a fight in a navy bar is to refer to these ships as 'long-arm Ornens', as this has connotations of cowardice and a reluctance to take risks.



STRIKE DESTROYER

ORNEN-CLASS

TL12		TONS	COST (MCr)
Hull	4,000 tons, Close Structure	—	180
Armour	Crystaliron, Armour: 10	500	90
M-Drive	Thrust 6	240	480
J-Drive	Jump-3	305	457.5
Power Plant	Fusion (TL12), Power 2,250	150	150
High Efficiency Batteries	Power 1,200	20	4
Fuel Tanks	Jump-3, 8 weeks of operation	1,230	—
Bridge		60	20
Computer	Computer/20	—	5
Sensors	Military	2	4.1
	Sensor Stations x8	8	4
Weapons	Large Fusion Gun Bay	500	50
	Small Torpedo Bays x4	200	12
	Dual Turrets (pulse lasers) x18	18	45
	Dual Turrets (sandcasters) x8	8	8
Ammunition	Sandcaster Storage (160 canisters)	8	—
	Torpedo Storage (120 torpedoes)	40	—
Craft	Standardised Docking Systems (40/80) x2	172	9.2
Systems	Repair Drones	40	8
	Brig	8	0.5
	Briefing Room	4	0.5
	Armoury	4	1
	Medical Bay	8	4
	UNREP System	6	3
	Workshop	6	0.9
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/3	—	0.3
	Fire Control/1	—	2
Staterooms	High x6	36	4.8
	Standard x68	272	34
Common Areas		90	9
Cargo		77	—

TOTAL: MCr 1576.8

CREW

CAPTAIN, PILOTS X3, ASTROGATOR, GUNNERS X42, WEAPONS TECHNICIANS X4, ENGINEERS X20, MAINTENANCE X4, STEWARDS X4, MEDIC, OFFICERS X4

RUNNING COSTS

MAINTENANCE COST
Cr131400/month

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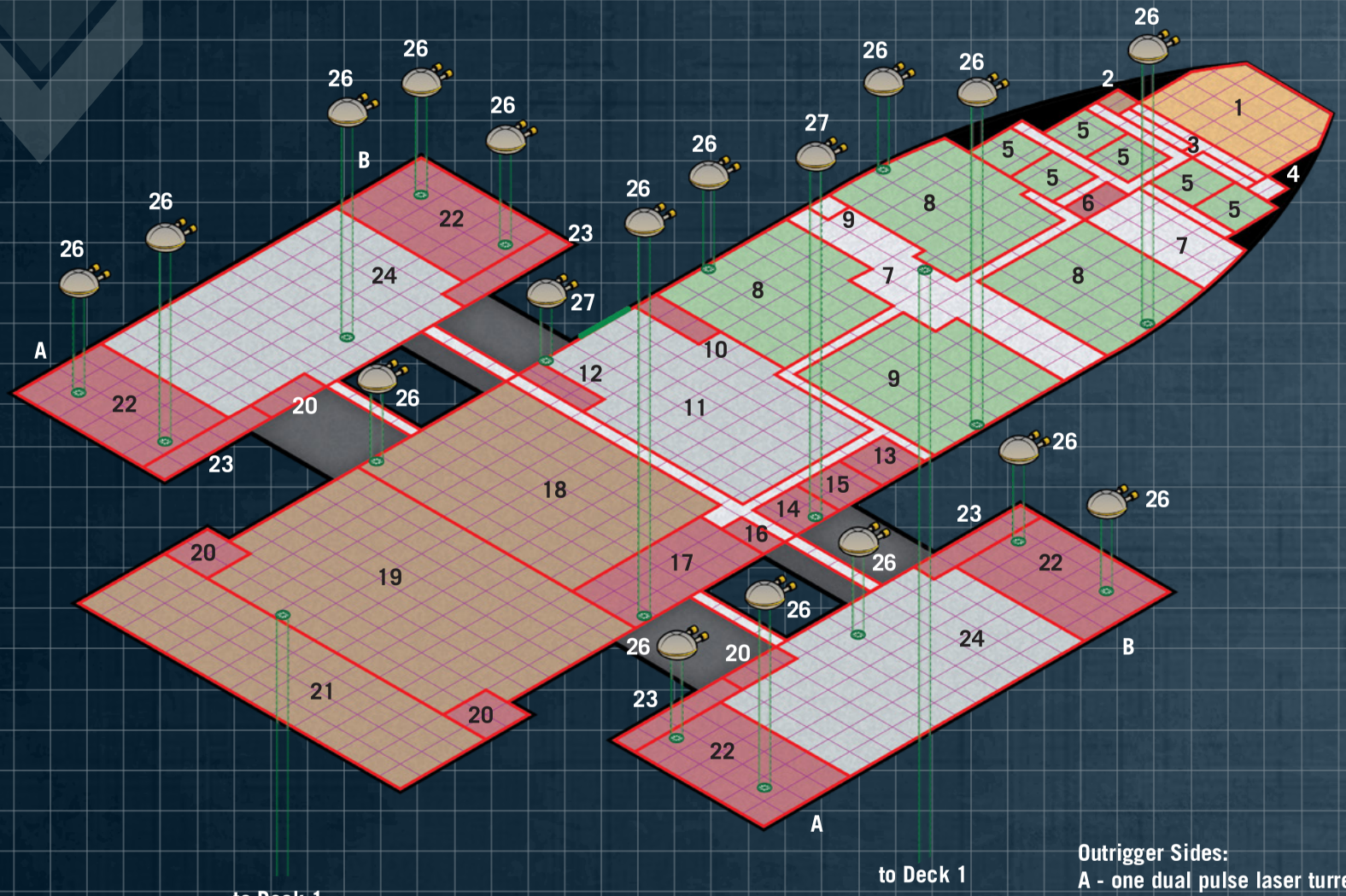
PURCHASE COST
MCr1576.8

POWER REQUIREMENTS

2,400 MANOEUVRE DRIVE	800 BASIC SHIP SYSTEMS
1,200 JUMP DRIVE	2 SENSORS
618 WEAPONS	

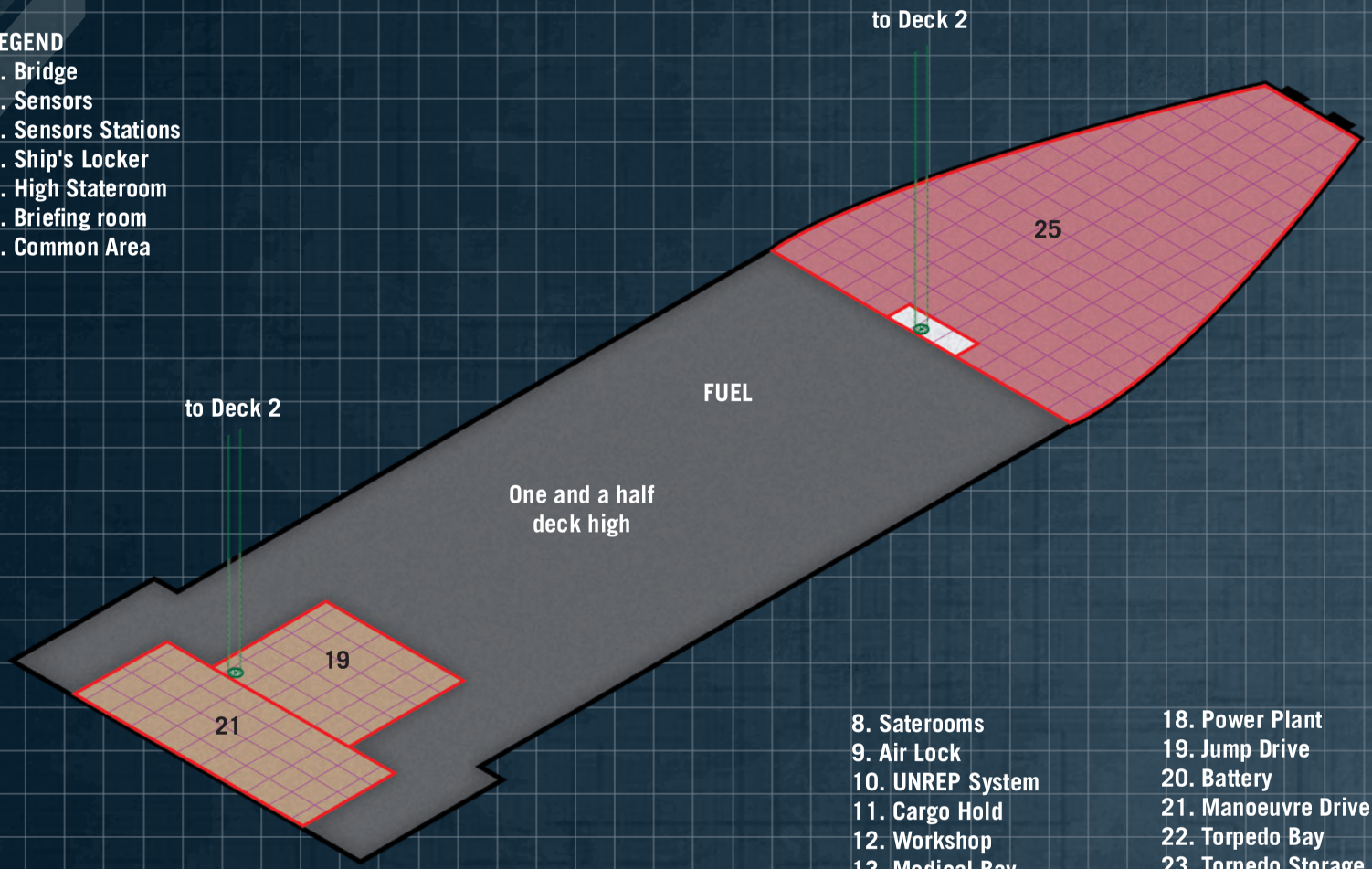
ORNEN STRIKE DESTROYER - DECK 2

1 SQUARE = 2 TONS



Outrigger Sides:
A - one dual pulse laser turret and one Sandcaster dual turret
B - two sandcaster turrets

ORNEN STRIKE DESTROYER - DECK 1



LEGEND

1. Bridge
2. Sensors
3. Sensors Stations
4. Ship's Locker
5. High Stateroom
6. Briefing room
7. Common Area
8. Saterooms
9. Air Lock
10. UNREP System
11. Cargo Hold
12. Workshop
13. Medical Bay
14. Canisters Storage
15. Brig
16. Armoury
17. Repair Drones
18. Power Plant
19. Jump Drive
20. Battery
21. Manoeuvre Drive
22. Torpedo Bay
23. Torpedo Storage
24. Docking Systems
25. Fusion Gun Bay
26. Pulse Lasers
27. Sandcasters

BYRDING ARMED MERCHANT CRUISER

Named for an ancient Norse trading vessel rather than using traditional Scandinavian ship names, the Byrding is designed for long trading cruises beyond the Sword Worlds and, not coincidentally, makes a decent raider or naval auxiliary. It is widely suspected that at any time some of the Byrdings deployed outside the Confederation are actually support ships for potential raiders, although this has never been proven. The only official statement on the subject is 'we would do that if it seemed appropriate', which manages to be vague, uninformative and slightly threatening all at once.

The Byrding is not economical as a freight hauler, but it is not intended to be, intended for long speculative trade cruises in potentially dangerous areas. Hull form is a central cylinder with two blocky projections aft with weapons and critical systems in the main hull, whilst the projections contain cargo and craft-operations systems. The vessel is built on a 5,600 ton hull but is officially rated as an 8,000-ton vessel. Its drives and systems are constructed on the assumption that a full complement of 2,400 tons of craft will be carried.

This ship has a spinal mount of sorts; an Integrated Munitions System with 12 launch modules. These are grouped in three blocks of four, each with a small magazine. The main missile magazine is deep within the main hull. Warheads and missile bodies can be rapidly moved around the ship using the IMS, permitting ready-use munitions intended for a damaged launcher to be redeployed. Each launcher has sufficient ammunition for 10 salvoes in its ready magazine, with 2,000 more missiles available at short notice. This is a very large amount of weaponry for a merchant ship, which is taken as confirmation that these vessels are intended to act as raiders or armed naval auxiliaries.

Secondary armament consists of four batteries each of three dual pulse lasers, located at intervals along the dorsal and ventral surfaces of the primary hull, plus four more turrets on each of the hull projections. These normally operate independently, defending the ship from attacks within their field of fire. Each projection has a small gunnery control centre for emergency use but all secondary weapons are normally controlled from the gunnery room immediately aft of the bridge. The IMS is mostly automated but missile preparation is handled by a team of four technicians at the main magazine, with missile specialists stationed in the gunnery room under the overall command of a gunnery officer. Again, it is unusual to find such a post on a merchant ship but the Byrding is not a conventional freighter.

The two hull projections has three integrated docking systems, located on the dorsal, ventral and external surfaces, each accommodating a total of 400 tons of craft, of 200 tons or less. Normally this would be 200-ton Ahven transports configured to carry cargo planetside or skim fuel from gas giants whilst the parent ship operates elsewhere. However, any or all of them could be substituted for 200-ton light gunboats or smaller craft such as the 80-ton Draug torpedo boat. Each of the six systems can only launch or recover one craft at a time, making larger craft more viable than a horde of fighters or utility boats but the Byrding can act as a fighter/strike boat carrier at need. It is customary in this case to carry and launch two 20-ton fighters for every 80-ton torpedo boat, deployed simultaneously in flights of three from each projection.

The projections also contain almost the entire cargo capacity of the vessel. This can be increased by nearly 2,000 tons if a full complement of 12 200-ton transports are carried and their cargo space utilised. The vessel's cranes are designed to move cargo quickly in and out of docked transports. The small main hull cargo hold takes a little longer to access and is normally reserved for mission supplies or highly valuable cargo.

Naturally for such a luxurious vessel the captain and one favoured crewmember (or a guest, or the owner-aboard) have extremely luxurious cabins and senior officers or traders are also accommodated in suitable style. The vessel has a briefing/conference room used to negotiate deals or plan a trading campaign. Many operators think of their interactions with foreign traders as being adversarial to the point that the term 'raid' is sometimes used for a friendly trade visit. The aim is to make as much money as possible or facilitate profit at a later port of call but there is always an element of ego and getting one over on the 'opposition' (this can mean other merchant cruiser captains as well as local merchants) about a Sword Worlds trade cruise.

Crew accommodation is generous, partly to allow additional traders, important guests and additional personnel to be carried at need, also because Byrdings were intended to attract the best crewmembers available. Having your own cabin and access to a reasonable amount of living space is a strong selling point when the alternative is a cramped berth aboard a low-status freighter.

Byrdings built for the military are almost exactly the same as the civilian version, although additional weapons are fitted. The three docking systems on each projection are often replaced with six or nine, each capable of handling smaller craft. Additional docking points can be added on the main hull, giving the Byrding the chance to operate as a fighter or fighter-and-gunboat carrier. When used by explorers, some of the cargo and craft capacity is given over to additional fuel, accomplished by carrying loaded fuel shuttles or semi-permanently attaching streamlined 200-ton fuel containers to the docking system in place of some of the craft complement.

ARMED MERCHANT CRUISER

BYRDING-CLASS

TL12		TONS	COST (MCr)
Hull	5,600 tons, Close Structure	—	252
Armour	Crystaliron, Armour: 2	140	25.2
M-Drive	Thrust 2	160	320
J-Drive	Jump-2	405	607.5
Power Plant	Fusion (TL12), Power 5,100	340	340
Fuel Tanks	Jump-2, 20 weeks of operation	1,770	—
Bridge		60	28
Computer	Computer/15	—	2
Sensors	Civilian	1	3
Weapons	Integrated Munition System (12 launch modules)	400	800
	Dual Turrets (pulse laser) x20	20	50
Ammunition	Missile Storage (2,000 missiles)	100	—
Craft	Standardised Docking System (200/400) x6	180	138
Systems	Repair Drones	56	11.2
	Cargo Cranes x2	15	15
	Armoury	4	1
	Medical Bay	4	2
	Brig	4	0.25
	Briefing Room	4	0.5
	Workshop	12	1.8
	Fuel Processor (400 tons/day)	20	1
	UNREP System	20	10
Software	Library	—	—
	Manoeuvre/0	—	—
	Jump Control/2	—	0.2
Staterooms	Luxury x2	20	3
	High x6	36	4.8
	Standard x64	256	32
Common Areas		120	12
Cargo		1,513	—

TOTAL: MCr 1576.8

CREW

CAPTAIN, PILOT, ASTROGATOR, ENGINEERS X26, MAINTENANCE X6, MEDIC, GUNNERS X29, STEWARDS X2, ADMINISTRATORS X3, OFFICERS X2

RUNNING COSTS

MAINTENANCE COST
Cr221704/month

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PURCHASE COST
MCr2660.45

POWER REQUIREMENTS

1,120 MANOEUVRE DRIVE

1,120 BASIC SHIP SYSTEMS

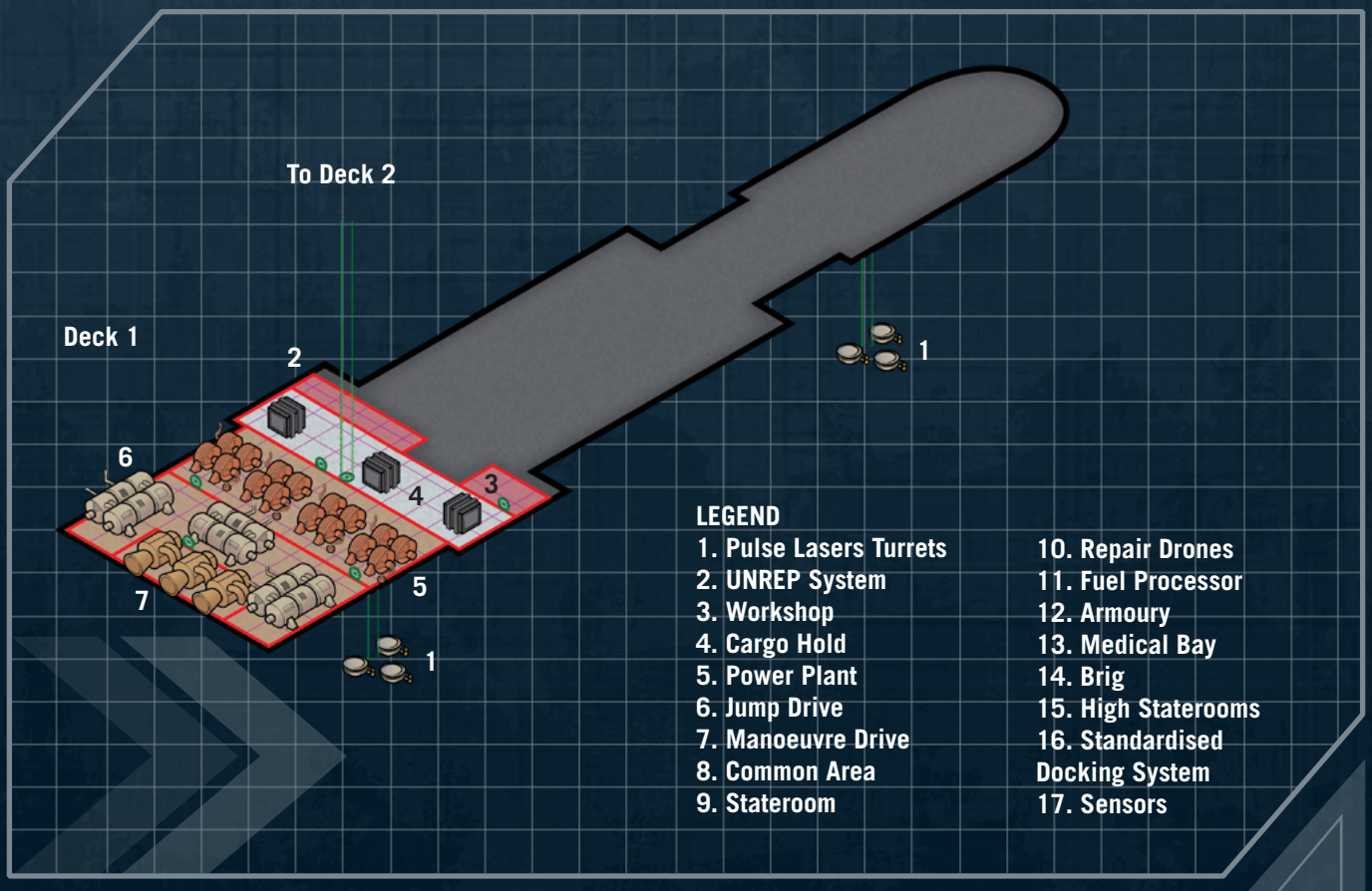
1,120 JUMP DRIVE

1 SENSORS

220 WEAPONS

2,454 HULL POINTS



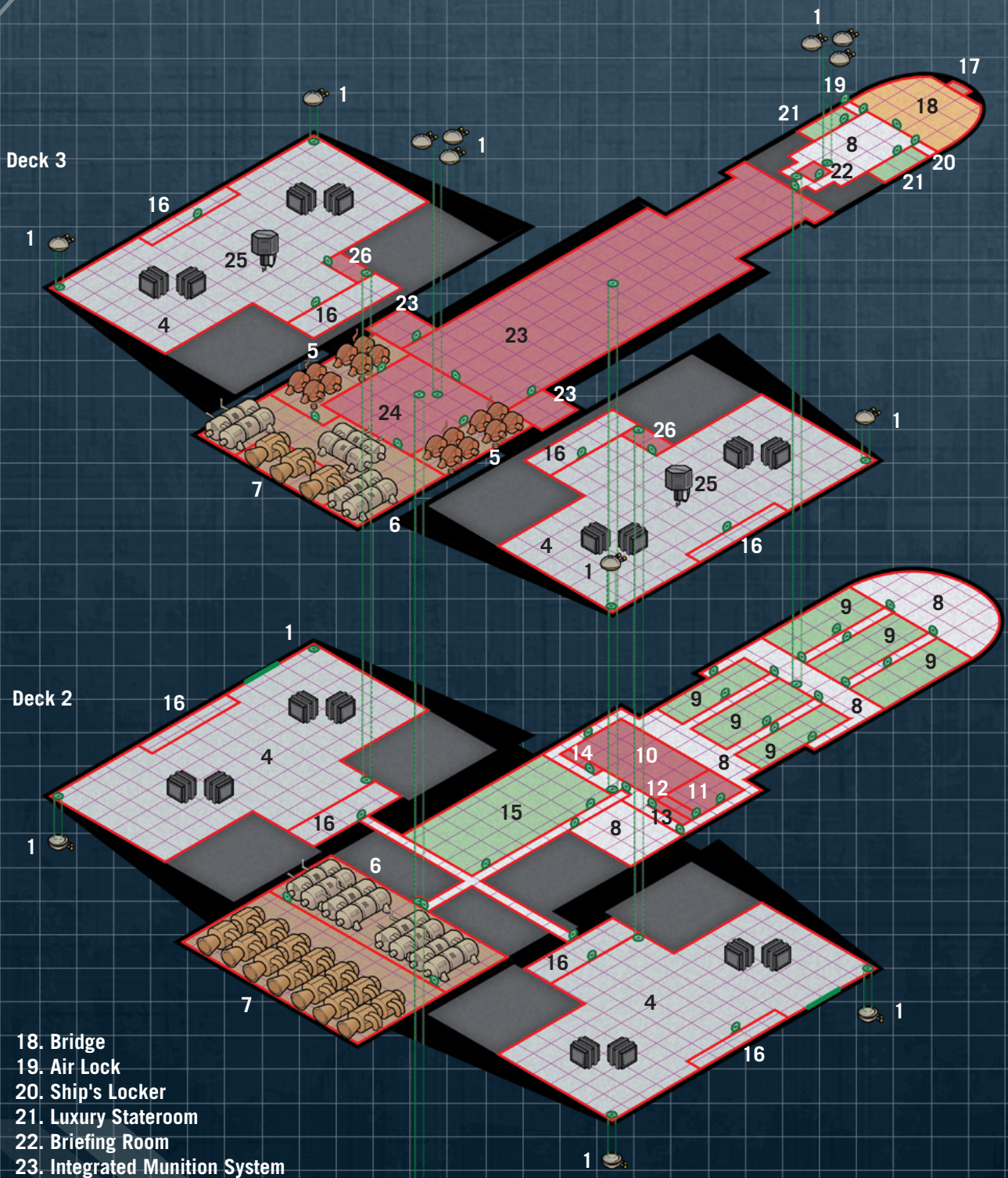


LEGEND

1. Pulse Lasers Turrets
2. UNREP System
3. Workshop
4. Cargo Hold
5. Power Plant
6. Jump Drive
7. Manoeuvre Drive
8. Common Area
9. Stateroom
10. Repair Drones
11. Fuel Processor
12. Armoury
13. Medical Bay
14. Brig
15. High Staterooms
16. Standardised Docking System
17. Sensors

BYRDING ARMED MERCHANT CRUISER

1 SQUARE = 4 TONS



18. Bridge
19. Air Lock
20. Ship's Locker
21. Luxury Stateroom
22. Briefing Room
23. Integrated Munition System
24. Missile Storage
25. Cargo Crane
26. Gunnery Control Centre

DENISOV BATTLECRUISER

The Denisov class is the pride of the Sword Worlds fleets and the most prestigious command available. It is not the largest or most heavily armed vessel available, nor is it a dedicated command cruiser despite it having command facilities. However, its dashing reputation and the possibility of being turned loose to conduct a spectacular raiding cruise makes the Denisov the most desirable posting an officer could wish for.

The Denisovs were designed as highly mobile super-cruisers rather than true capital ships but mount a battleship-grade meson gun as their primary armament. This is backed up with a potent missile capability for standoff attacks and a close-range torpedo and fusion gun fit. The pulse laser armament is considered to be defensive and grouped to engage small craft and light combatants rather than in large ship-killing batteries. Heavy armour and high mobility ensure survivability, along with an unusual fuel allocation intended to allow the cruiser to make two rapid two-parsec jumps when redeploying or a three-parsec jump into enemy territory for a raid, with enough fuel left to escape to a prearranged rendezvous point where support vessels will be waiting.

The Denisov is laid out in conventional Sword Worlds style, with a blocky cylinder central hull and two cylindrical outriggers containing additional systems. Unusually, the spinal mass driver tunnel runs along the lower decks of the main hull, terminating at a particle generation chamber. The power layout is also unusual, with a primary power plant in the central section of the hull and a smaller one aft in the engineering spaces. Each of the outriggers has a small power plant as well, ensuring a single hit cannot disable the ship entirely.

The primary bridge is forward, with a luxurious officer's country immediately aft. This is very well appointed, as would be expected of the finest warships in the Sword Worlds. The flag bridge is immediately aft of officer's country, with a secondary bridge buried deep in the hull. This normally serves as a gunnery control station but the ship can be commanded from there. The command bridge may be used by a flag officer but more commonly serves as an intelligence and planning centre. The computer core at the heart of the ship runs virtual crew and gunnery software suites, purchased from beyond the borders of the Sword Worlds.

The central section of the ship contains crew accommodation, medical and workshop facilities, and the primary power plant. Aft of this lie the engineering chambers with the secondary power plant, jump and manoeuvre drives. The outriggers each contain a power plant, some crew accommodation and a barracks for naval infantry if they are carried, plus cargo space and hangars. It is customary to have one rigger launching whilst the other is recovering craft but since small craft are rarely deployed under ship-to-ship combat conditions there is considerable flexibility.

Much of the missile armament is located in the outriggers, with eight missile bays and their associated magazines in each rigger. The others are dispersed along the main hull. The fusion gun armament is also positioned on the external and forward faces of the outriggers, optimised for a concentrated salvo during a close pass. The torpedo armament, on the other hand, is concentrated forward on the main hull.

The defensive laser armament is grouped into 32 batteries of four turrets and 32 lone turrets, dispersed across the hull and outriggers to give maximum coverage. Multiple batteries can be concentrated on a given target but anything worth engaging in this way will be dealt with using the heavier weapons.

Consideration has been given to replacing the command cruisers in all fleets with Denisovs but this has met with strong opposition – largely from current and former battlecruiser captains. The battlecruiser force is currently something of a wild card; its capabilities are obviously considerable but it remains to be seen whether a buccaneering spirit is really appropriate in modern naval warfare. It has been suggested that whilst battlecruisers are off performing daredevil exploits and covering themselves in glory, the war will be won or lost by more pedestrian battleships and cruisers slugging it out with the enemy. Of course, this sort of comment is typically made by the commanders of those ships, officers passed over for command of a Denisov.

BATTLECRUISER

DENISOV

TL12		TONS	COST (MCr)
Hull	80,000 tons, Standard	—	4000
	Reinforced Hull	—	2000
Armour	Crystaliron, Armour: 10	10,000	3000
M-Drive	Thrust 6	4,800	9600
J-Drive	Jump-3	6,005	9007.5
Power Plant	Fusion (TL12), Power 93,000	6,200	6200
Fuel Tanks	Jump-3 plus jump-1, 20 weeks of operation	35,100	—
Bridge	2x Standard Bridge (holographic controls)	120	1000
	Command Bridge	80	600
Computer	Core/70	—	80
Sensors	Improved	3	4.3
	Sensor Stations x16	16	8
Weapons	Spinal Meson Gun (TL12)	7,500	2000
	Medium Missile Bays x24	2,400	600
	Medium Torpedo Bays x24	2,400	144
	Fusion Gun Barbettes x24	120	96
	Dual Turrets (pulse lasers) x160	160	400
	Nuclear Dampers x40	400	400
Ammunition	Missile Storage (3,072 missiles)	256	—
	Torpedo Storage (576 torpedoes)	192	—
Systems	Full Hangars (80 tons) x4	640	128
	Repair Drones	800	160
	Brig (Capacity 12)	8	0.5
	Briefing Rooms x4	16	2
	Armoury	40	10
	Medical Bay	40	20
	Workshop x10	60	9
	Fuel Processor (1,000 tons/day)	50	2.5
Staterooms	Luxury x6	60	9
	High x12	72	9.6
	Standard x220	880	110
	Barracks x100	200	10

TOTAL: MCr 1576.8

CREW

CAPTAIN, PILOTS X3, ASTROGATOR, GUNNERS X275, MEDIC X4, ENGINEERS X112, MAINTENANCE X24, STEWARDS X7, ADMINISTRATORS X16, OFFICERS X9

RUNNING COSTS

MAINTENANCE COST
Cr3.3199/month

PURCHASE COST
MCr39838.7

POWER REQUIREMENTS

48,000 MANOEUVRE DRIVE	16,000 BASIC SHIP SYSTEMS
24,000 JUMP DRIVE	4 SENSORS
3,208 WEAPONS	

44,000
HULL POINTS

BATTLECRUISER

DENISOV

TL12		TONS	COST (MCr)
Software	Library	—	—
	Manoeuvre/0	—	—
	Evade/2	—	2
	Advanced Fire Control/2	—	15
	Auto-Repair/2	—	10
	Anti-Hijack/2	—	8
	Battle System/2	—	24
	Electronic Warfare/1	—	15
	Launch Solution/3	—	16
	Point Defence/2	—	12
	Virtual Crew/1	—	1
	Virtual Gunner/2	—	5
Common Areas		400	40
Cargo		982	—

TOTAL: MCr 1576.8

POWER REQUIREMENTS

48,000 MANOEUVRE DRIVE

16,000 BASIC SHIP SYSTEMS

24,000 JUMP DRIVE

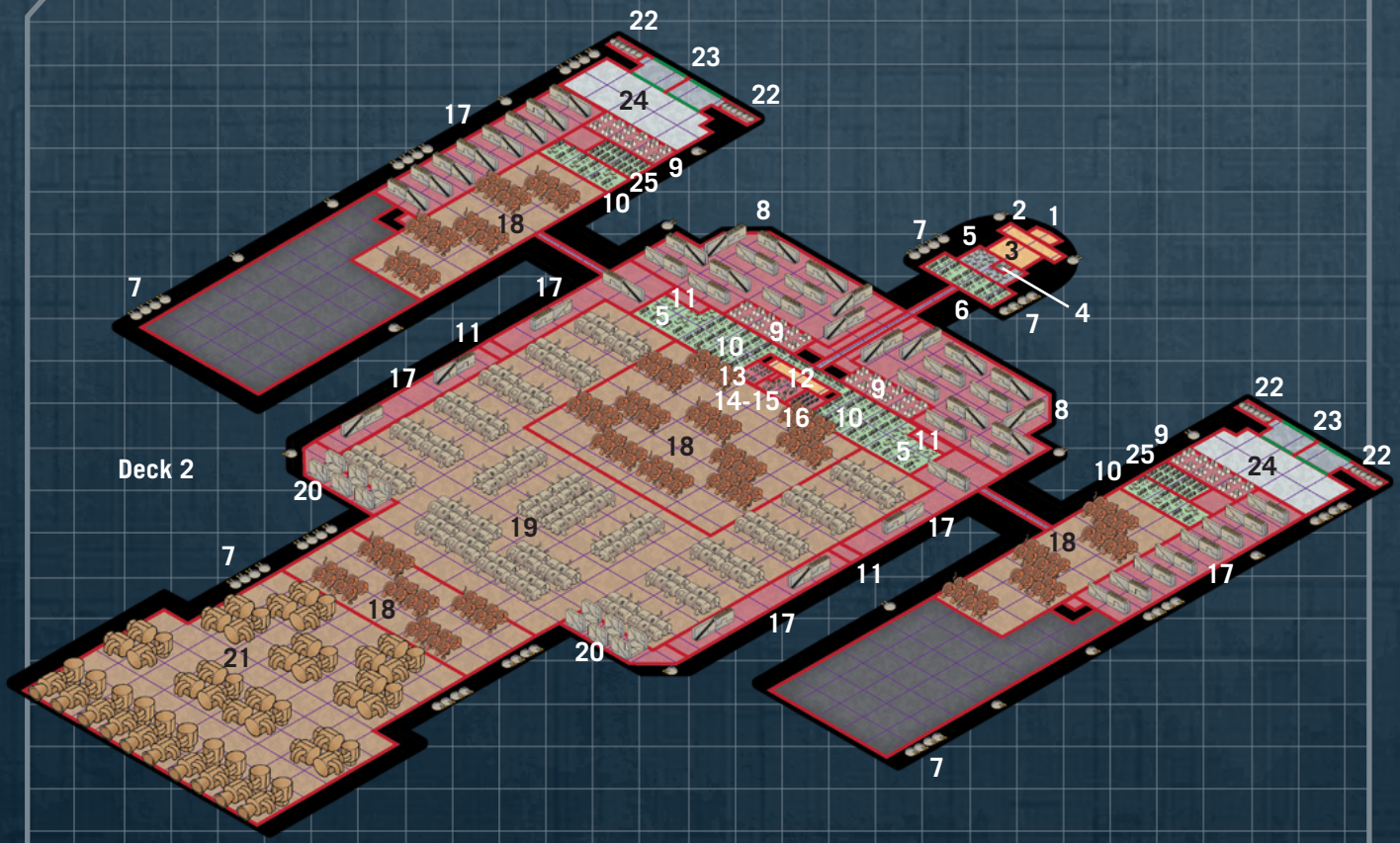
4 SENSORS

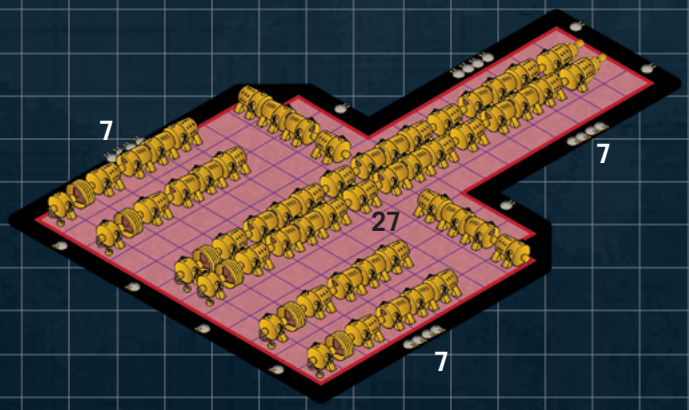
3,208 WEAPONS

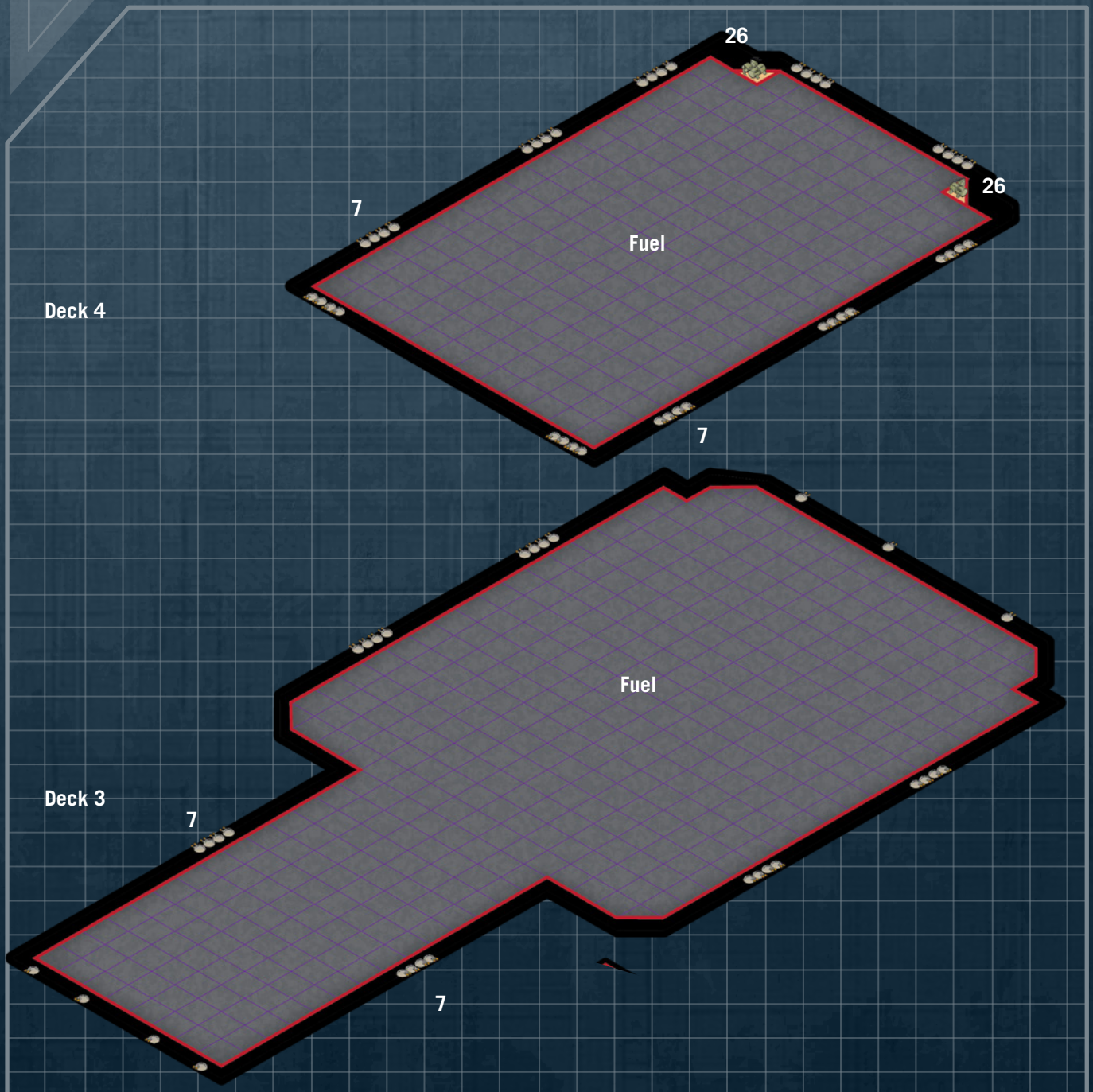
44,000 HULL POINTS



1 SQUARE = 50 TONS







LEGEND

1. Sensors & Sensor Station
2. Primary Bridge
3. Command Bridge
4. Briefing Room
5. Common Area
6. Luxury and High Staterooms
7. Pulse Lasers Turrets
8. Torpedo Bay and Storage
9. Repair Drones
10. Staterooms
11. Missile Storage
12. Secondary Bridge
13. Medical Bay
14. Brig
15. Workshops
16. Armoury
17. Missile Bay
18. Power Plant
19. Jump Drive
20. Nuclear Dampers
21. Manoeuvre Drive
22. Fusion Gun Barbettes
23. Full hangar
24. Cargo Hold
25. Barracks
26. Fuel Processor
27. Spinal Mount Gun
28. Air Lock

The Travellers Aid Society presents

SWORD WORLDS

CENTRAL SUPLLY CATALOGUE

4 WHATEVER YOU NEED!

0100110101101

Humans tend to have the same number of thumbs wherever they live, so most Sword Worlds equipment is broadly similar to that in use elsewhere at the same Tech Level. However, cultural and experiential differences have led to some items being considerably different to the norm.



PALVELUPISTOOLI - Detachable cylinder allowing quick reloading

Personal Weapons
Vehicle Systems
Vehicles

PERSONAL WEAPONS

CENTRAL SUPPLY CATALOGUE

Most Sword Worlds weapons are based on mature chemical propulsion principles rather than more complex technologies. The martial origins of the Sword Worlds mean there is little distinction between military and civilian weaponry and most military forces use the same weapons a steadholder would have in their gun rack. Prowess with the rifle is the hallmark of a 'real man' on many of the Sword Worlds, both in civilian and military circles. Many militaries favour light, fully-automatic assault rifles for general issue, enabling any rifleman to lay down suppressing fire. The Sword Worlds have a different philosophy, based around marksmanship at any range.

ALUKSEN ASE

This is of similar design to the VPF but uses a longer and more powerful cartridge. Although developed as a boarding weapon, it has been co-opted by assault troops and many law enforcement agencies for room-clearance and urban combat. With a longer barrel and a fixed stock, the Aluksen Ase can mount a bayonet if necessary. It is normally fed from a bulky 7-round box magazine but a 15-round drum is also available. Standard practice is to issue one drum and several boxes to personnel, who carry the weapon with a box in place as the drum is clumsy. It is normally fitted just before an assault begins to maximise firepower.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Aluksen Ase (Standard Ammunition)	10	50m	4D+2	4.5	Cr450	7 or 15	Cr15 or 40	—

HOLMGANG SWORD

The Holmgang sword is a basket-hilted, double-edged weapon with a blade around 72–78cm in length. It can deliver a deadly thrust but is more commonly used for cutting. A skilled user is well-protected by the basket, which does more than protect the hand; it can act almost like a shield, if used correctly. The Holmgang sword is light enough to fence with, rather than hacking lumps out an opponent, but will deliver a serious wound to an unarmoured opponent.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Holmgang Sword	10	Melee	2D	1.35	Cr250	—	—	—

JAEGERGEVAR

The standard personal weapon for infantry is the Jaegergevar. The word 'Jaegergevar' comes from two different languages and translates roughly as 'skirmisher/marksman rifle'. Various designs exist, usually in the same 8x50mm calibre. Variants include weapons with folding stocks or shortened barrels but the general form is a semi-automatic weapon with a good set of iron sights, well-made and capable of accurate fire out to a great distance. Most civilian users fit a basic telescopic scope, whereas military weapons are normally fitted with a variable 1/4/2.5/4x sight with a clip-on magnification aid increasing this to 10x. With this weapon, 'every man is a marksman' as the slogan goes. In practice, much depends on the capabilities of the individual soldier but, since marksmanship is one of the most prized skills a man can display, levels are generally high.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Jaegergevar	10	300m	3D	3.5	Cr400	15	Cr10	Scope

JAEGERKARBIN

A variant of the standard rifle, usually referred to as a Jaegerkarbin, is used by vehicle crews and urban combat units. Its shorter barrel and folding stock make it much more handy for close-quarters engagements but effective range is also reduced.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Jaegerkarbin	10	200m	3D	2.8	Cr400	15	Cr10	Scope

PALVELUPISTOOLI

The standard service revolver, or Palvelupistooli (inevitably reduced to 'stoolie' by Sword Worlders and outsiders alike), has a detachable cylinder allowing quick reloading, though multiple spare cylinders are heavy to carry. It is customary to issue three cylinders with a gun, along with additional loose ammunition. Many users will carry one cylinder pre-loaded with specialist ammunition for a quick change. The use of revolvers strikes some observers as odd but it is in keeping with the idea that it is better to put one heavy round on target than several into the air. The high-explosive armour-piercing (HEAP) round offsets relatively low velocity with a shaped charge effect.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Palvelupistooli	10	10m	4D-3	1.6	Cr450	6	Cr15	—
Palvelupistooli (HEAP)	10	5m	3D-2	1.6	Cr450	6	Cr20	AP 2

SEAX

The Seax is essentially an overgrown knife suitable for chopping undergrowth or the limbs off enemies. It has parallels in many other starfaring cultures, more commonly serving as a tool than a weapon.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Seax	10	Melee	2D-1	1	Cr25	—	—	—

VM-11

A heavy sniping/anti-materiel rifle is widely used, named the VM-11 (from Voimakas Kivaari or 'powerful rifle' and its 11mm calibre). Whilst Sword Worlds infantry units proudly state that 'every man is a marksman' – and there is much truth to this – a force will also have several specialist marksmen who may not have been fully trained in the stealth and observation skills of a sniper but have an equivalent standard of marksmanship. The VM-11 is highly effective in urban environments, allowing troops stationed in high buildings to engage hostiles at great distances or ambush enemies at close range in more cluttered terrain. The rifle uses an armour-piercing round that can penetrate light cover, body armour and even some vehicles.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
VM-11	10	2,000m	3D+4	10	Cr1000	5	Cr20	AP 6, Scope

VAERKTOJSOKS

The Vaerktojsoks, or 'tool axe', is intended more for utility than combat but can be formidable in a fight. In addition to personal issue Vaertojsoks, they can be found in rescue and survival kits and are designed such that the haft can function as a crowbar and the weapon be used to secure a climbing or rescue line.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
Vaerktojsoks	10	Melee	2D+2	1.2	Cr35	—	—	—

VPF

The VPF (from våben af personlig forsvar, or 'weapon of personal defence') is a semi-automatic weapon, intended to give a downed pilot or starship crewman heavy close-range firepower in an emergency. It has no shoulder stock and a short barrel, and is not intended as a combat weapon so much as a tool of desperate self-defence. However, VPFs are carried by some officers and non-infantry personnel instead of a handgun and may see use in the hands of a point man conducting counter-ambush or room-clearance drills. VPF combat ammunition is of a single type, a heavy man-stopping buckshot shell with poor performance against armour but excellent knockdown properties.



Weapon	TL	Range	Damage	Kg	Cost	Magazine	Magazine Cost	Traits
VPF	10	25m	3D-1	2.5	Cr175	5	Cr10	—

VEHICLE SYSTEMS

CENTRAL SUPPLY CATALOGUE

ACTIVE VEHICLE PROTECTION SYSTEM

An active VPS has all the same functions as the passive version but in addition carries a one-shot dispenser capable of laying a 5m high, 10m long curtain of thermal smoke laced with metallic and prismatic materials. The system creates a highly attractive target for Smart weapons whilst at the same time preventing their sensors from seeing what is on the far side. Since the curtain is much larger than the deploying vehicle, the chance of a hit by Smart weapons, even those of higher TL than the dispenser, is greatly reduced. DM-3 is imposed on all Smart weapons targeting a vehicle behind the cloud, whilst lasers and optical/thermal devices cannot obtain any useful information through the cloud and will be unable to provide a targeting lock.

STANDOFF DECOY SYSTEM

The active VPS was developed as a response to advanced Imperial sensors and guidance systems, which are not affected by the relatively primitive decoys used by the Sword Worlds. The sensor-opaque cloud delivered by an active VPS is also used in the much larger standoff decoy system (SDS), which instead delivers a 50m long by 10m high cloud out to a range of 2km using large rockets. It carries two full reloads allowing the system to be used three times in total.

Generally referred to as a 'smokescreen' although far more sophisticated than that, a cloud of this sort will persist for several minutes and blind enemy Smart weapons to anything within or beyond it. The cloud can be used defensively or dropped between friendly and hostile forces. It may also be used offensively, launched into enemy positions to confuse Smart weapons, turning an attack into a close-quarters brawl where the inferior electronics of Sword Worlds vehicles are not at such a disadvantage.

PASSIVE VEHICLE PROTECTION SYSTEM

A passive VPS is an integrated unit combining the functions of smoke discharger, prismatic aerosol discharger and decoy dispenser. The unit is integrated with laser detectors and will function automatically unless overridden. It can also be fired manually. Small launchers on the corners of the vehicle dispense canisters that almost instantly burst to create a mix of 'hot smoke' opaque to optical and thermal sensors, laser-scattering crystals and radar-opaque metallic fragments. The effect will advertise that *something* is present to almost any sensor suite in range but prevents targeting systems from gaining a solid lock. The effect is to impose DM-2 on attack rolls targeting the vehicle and to reduce laser damage by 2D.

A larger dispenser launches decoys away from the vehicle, hopefully drawing off guided weapons. These impose DM-2 on attack rolls using Smart weapons but are ineffective against weapons of a higher Tech Level than the munitions. Munitions are normally obtained from TL12 manufacturers but TL10 canisters are sometimes substituted when stocks run low. The passive VPS has enough decoys for 10 launches and sufficient small canisters for 25 uses.

ASSAULT DEFENCE SYSTEM

The Assault Defence System, or ADS, is intended to eliminate infantry threats close to a vehicle. It projects a pattern of small grenades upwards, which scatter small fragments in a 10m circle. The system contains enough grenades for five uses and can be set to trigger automatically when infantry-sized targets are in range, although it is more commonly used under manual control to avoid endangering nearby friendly personnel. Grenade fragment dispersion is rather random, with any personnel in the area taking 1Dx1D damage.

System	TL	Spaces	Cost
Passive VPS	10	2	Cr10000
Active VPS	10	4	Cr50000
Standoff Decoy System	10	6	Cr250000
Assault Defence System	10	3	Cr30000

PENETRATOR CANNON

The penetrator cannon is a scaled-up version of the gauss cannon, using similar principles but throwing a larger projectile less efficiently. Range is also shorter and bulk much greater. The relatively large projectile permits a range of ammunition to be delivered, although normally a heavy armour-piercing round is carried. A canister munition is available for anti-personnel use, bursting upon leaving the muzzle to create a shotgun effect with hundreds of long heavy-alloy darts. A bunker-busting round is also available, which trades mass (and therefore penetration) for an explosive charge that detonates after the round has punched through into a fortification or vehicle.

If a penetrator round causes any damage with its first damage roll, it will explode inside its target and deliver its secondary explosive damage to any personnel within 6m. If it fails to completely penetrate a vehicle or building the explosive effect is wasted.



Weapon	TL	Range	Damage	Spaces	Cost	Magazine	Magazine Cost	Traits
Penetrator Cannon	12	2	12D	25	MCr2	12	Cr500000	AP 18, Blast 15
Penetrator Cannon (canister)	12	0.5	3D	25	MCr2	12	Cr300000	AP 6, Blast 15
Penetrator Cannon (bunker-buster)	12	2	8D + 6D (explosive)	25	MCr2	12	Cr400000	AP 12, Blast 15

VEIJARI WHEELED UTILITY VEHICLE

TL	10
SKILL	DRIVE (WHEEL)
AGILITY	+0
SPEED (CRUISE)	HIGH (MEDIUM)
RANGE (CRUISE)	500 (750)
CREW	2
PASSENGERS	4
CARGO	0.5 TON
HULL	24
SHIPPING	6 TONS
COST	CR12500

ARMOUR

FRONT	6
REAR	6
SIDES	6



EQUIPMENT AND WEAPONS

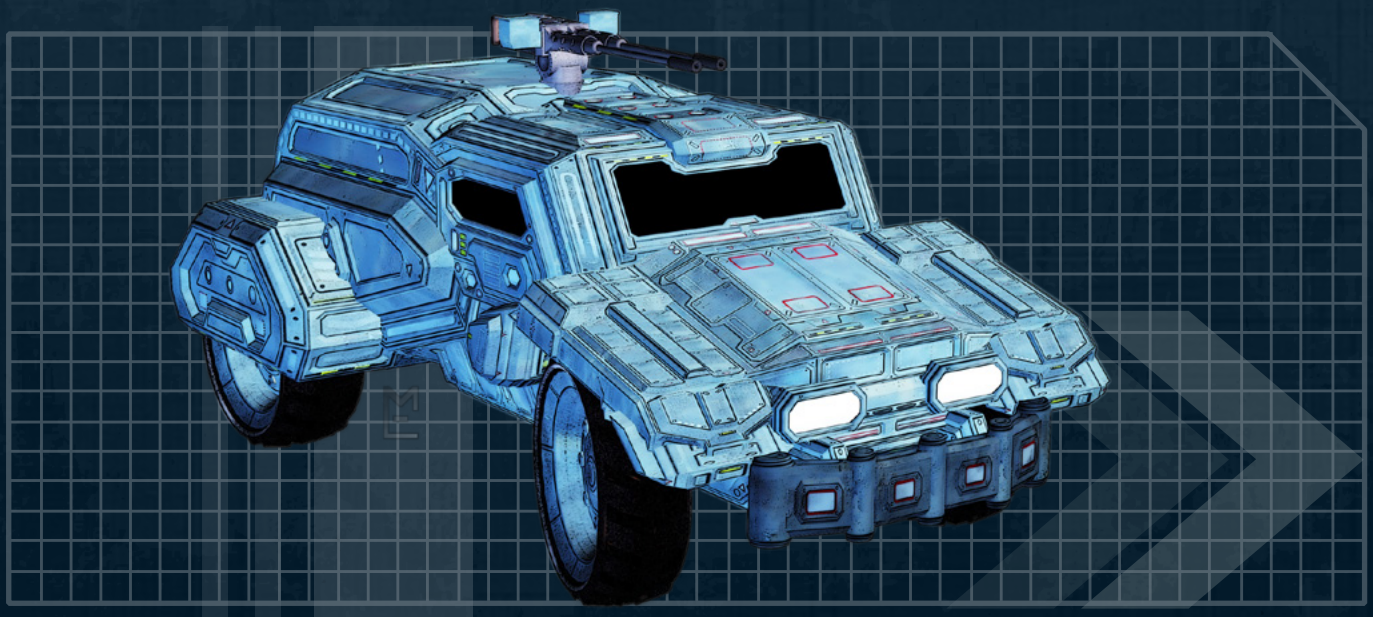
Communication System (improved), Control Systems (basic), Fire Extinguishers

Pintle Mount (machinegun, front)

Autopilot (skill level)	—
Communications (range)	500km
Navigation (Navigation DM)	+2
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	—
Stealth (Electronics (sensors) DM)	—

TRAITS

Off-Roader



VEIJARI WHEELED UTILITY VEHICLE

The Veijari is a multipurpose vehicle used by most Sword Worlds militaries in one guise or another. Like many of their ground vehicles, it is built at TL10, allowing construction almost anywhere. Equipment is basic and protection light but this is not a combat vehicle – at least, it was not envisioned that way. Veijaris are frequently pressed into service for patrol and convoy escort work, making brushes with insurgents and irregular forces commonplace. The vehicle is adequate for this situation but cannot withstand concentrated small arms fire, let alone heavier weapons.

In its intended role, the Veijari serves as a light transport and liaison vehicle, granting mobility to elements of a unit that have no other transport available. Most light infantry formations have a few Veijaris attached to their headquarters and take them along in addition to whatever transport they are allocated. The same applies to most other formations; Veijaris can be encountered racing around on all manner of errands wherever a military unit is stationed.

The Veijari has a poor safety record but this is more to do with them being driven by aggressive young men than any defect of the vehicle. Used correctly, the off-road capabilities of the Veijari are quite good; their tendency to roll over is primarily due to attempts to beat someone else's record for a high-speed traverse or conquer an even more insane slope than the last guy.

Although 'officially' mounting a machinegun, Veijaris are often used as weapons carriers and can be encountered with anti-aircraft missiles or light autocannon. This requires cutting away the rear of the passenger compartment, a modification generally applied without much regard to aesthetics. It is common to encounter open-topped Veijaris that look like they have already had a visit to the scrap yard.

PK-1065 (PANSSAROITU KULJETUS) WHEELED ARMOURED PERSONNEL CARRIER

The PK-1065 is probably the widest used combat vehicle in use by the militaries of the Sword Worlds. Prosaically designated an 'armoured transport vehicle' this design has been in service since the 1060s and been developed to fill specialist roles. The PK-1065 family of armoured vehicles are manufactured at TL10 in a variety of locations and are found in most Sword Worlds militaries. The vehicle runs on six large wheels and is capable of crossing a water obstacle without preparation. It is slow and clumsy in water, propelling itself by the motion of its rotating wheels.

When serving as an APC, the PK-1065 is nicknamed the 'Skoeld'. Armour is light but sufficient to protect the crew of two from small arms and light support weapons. A remotely controlled turret mounts a light autocannon with a one-shot anti-air missile mounted directly above it. This can be substituted for an anti-armour missile if desired.

The Skoeld is designed to carry 8–10 infantry personnel plus equipment, in addition to its crew. It is a basic vehicle but a useful one, providing fire support and a measure of air defence to its infantry complement. The chassis is used as the basis for a variety of vehicles including command posts, field ambulances and platforms for heavy weapons, all of which more or less have the same specifications.

VEIJARI WHEELED UTILITY VEHICLE

Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Machinegun	400	3D	30	Cr100	Auto 3	—

PK-1065 WHEELED ARMOURED PERSONNEL CARRIER

Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Light Autocannon	1	6D	500	Cr1000	Auto 3	+1
Light Anti-Air Missile	5	6D	1	—	One-Use, Smart	+1

PK-1065 WHEELED APC

TL	10
SKILL	DRIVE (WHEEL)
AGILITY	–1
SPEED (CRUISE)	MEDIUM (SLOW)
RANGE (CRUISE)	500 (750)
CREW	2
PASSENGERS	8
CARGO	1 TON
HULL	90
SHIPPING	15 TONS
COST	CR284000

ARMOUR

FRONT	21
REAR	15
SIDES	18



EQUIPMENT AND WEAPONS

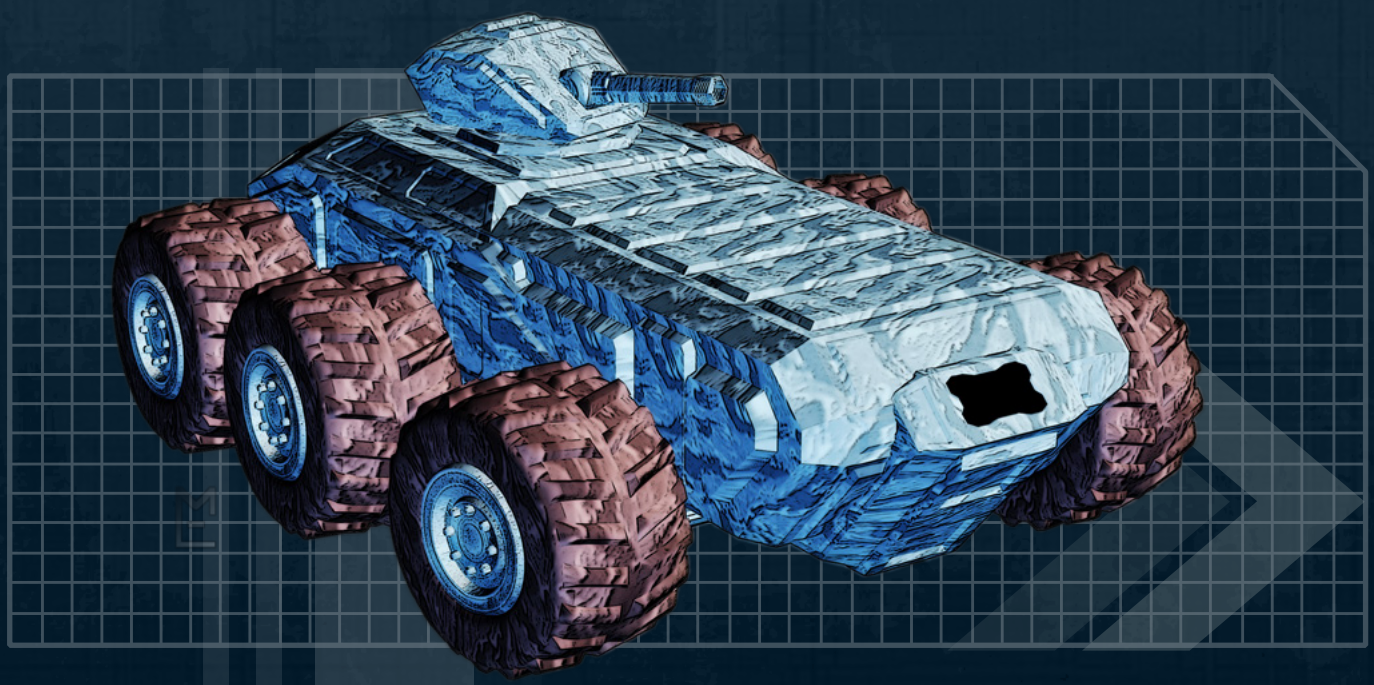
Aquatic Drive, Communications Systems (encrypted, improved), Control Systems (improved), Fire Extinguishers, Navigation Systems (improved), Sensors (improved)

Small Turret (light autocannon, anti-air missile, improved fire control)

Autopilot (skill level)	—
Communications (range)	500km
Navigation (Navigation DM)	+2
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	—
Stealth (Electronics (sensors) DM)	—

TRAITS

Off-Roader



MTD-1088 (MAGNETISK TANKDÄMPARE)

The MTD-1088, or 'magnetic tank destroyer' was developed from the PK-1065 to fulfil the need for a light, relatively inexpensive vehicle capable of mounting a weapon powerful enough to cripple a light grav tank. The remotely controlled turret mounts a powerful gauss cannon built at TL12 and mated to the standard TL10 chassis. Alongside it is a 25mm autocannon for dealing with 'soft' targets. There is also a pintle-mounted machinegun for close-in defence against infantry.

The much larger turret of the MTD-1088 blocks off part of the internal compartment, making the vehicle unsuitable for personnel transport. It is primarily used as an ambush hunter, lurking among the buildings of a city or behind terrain, engaging ground vehicles or grav tanks. In some areas pre-prepared hides or bunkers are available, allowing an MTD-1088 to strike then hide from retaliation.

HNAEFIR MILITARISED AIR/RAFT

Although designated a 'militarised' vehicle, the Hnaefir is derived from a civilian model and modified only by adding a layer of light armour and coat of dark green paint. It is a conventional design, with two crew seats in the front of the open-topped central compartment and removable seating for four more personnel behind. If a light support weapon is needed, a pintle mount is added. Alternatively, removal of the seating allows one ton of cargo to be carried.

Air/rafts are not considered combat vehicles, although they are used for reconnaissance purposes. The only direct-combat application for this vehicle is in urban situations, carrying an infantry squad to engage opponents in tall buildings with personal weapons. When not employed in this manner the Hnaefir is very much a utility and liaison vehicle.

P-984 (PATRULJEHOLDER) ARMOURED PERSONNEL CARRIER

In service since the late 900s, the P-984 design has been updated on several occasions without altering its basic configuration. As a result, surplus P-984s are often encountered serving as transport for exploration and survey teams, and in similar non-military applications.

Like most grav combat vehicles, the P-984 is most heavily armoured in the frontal arc, with a heavy single-piece glacis plate. Driving and command periscopes are available for emergencies but rarely used; an extensive camera and sensor fit gives good all-round vision and can display information handed off by other vehicles in a formation.

Armament is similar to the wheeled equivalent, largely because the turret of the P-984 was used on the PK-1065 APC almost without alteration. The light autocannon and single anti-air missile are considered a suitable mix for most applications, giving vehicle formations a considerable aerospace threat, although the missile is more commonly used against other grav vehicles than aircraft. A vehicle protection system is carried, giving a measure of defence against lasers and guided weapons, along with an anti-missile minigun that can be directed against personnel targets at need.

The P-984 APC is operated by a crew of three (driver, gunner and commander) and designed to carry up to 12 infantry personnel with enough room to make a rapid disembarkation through the rear doors. More personnel can be jammed in but this makes it difficult to move in and out of the vehicle. The large space at the rear is often converted to other uses, spawning a range of P-984 variants that include weapons carriers, field ambulances and communications vehicles.

MTD-1088 (MAGNETISK TANKDÄMPARE)

Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Gauss Cannon	2	1DD	200	C1000	AP 10, Auto 3	+1
Light Autocannon	1	6D	500	Cr1000	Auto 3	+1
Machinegun	400	3D	30	Cr100	Auto 3	—

P-984 ARMOURED PERSONNEL CARRIER

Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Light Autocannon	1	6D	500	Cr1000	Auto 3	+3
Light Anti-Air Missile	5	6D	1	—	One-Use, Smart	0
Anti-Missile System (minigun)	0.5	2D	600	Cr1000	Auto 6	0

MTD-1088 (MAGNETISK TANKDÄMPARE)

TL	10
SKILL	DRIVE (WHEEL)
AGILITY	–1
SPEED (CRUISE)	MEDIUM (SLOW)
RANGE (CRUISE)	500 (750)
CREW	3
PASSENGERS	—
CARGO	2 TONS
HULL	90
SHIPPING	15 TONS
COST	CR521275

ARMOUR

FRONT	14
REAR	14
SIDES	14



EQUIPMENT AND WEAPONS

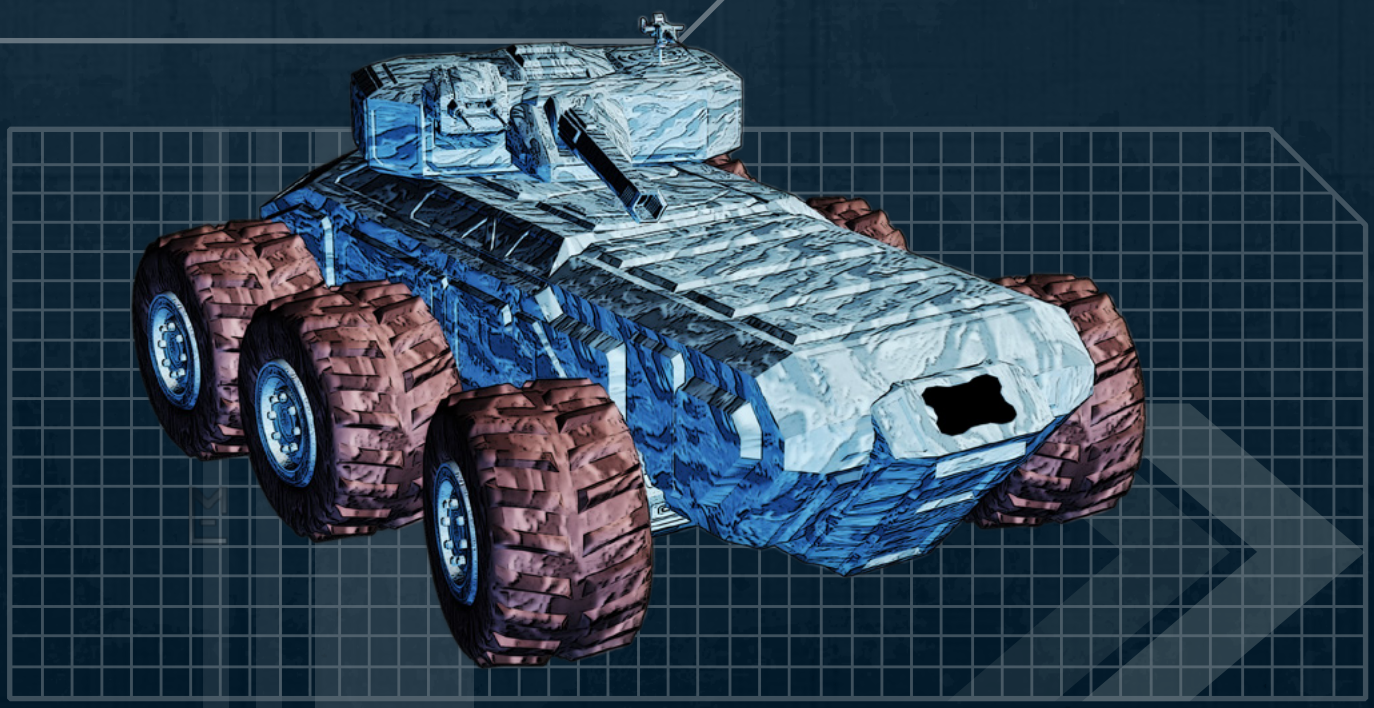
Aquatic Drive, Communications Systems (encrypted, improved), Control Systems (improved), Fire Extinguishers, Navigation Systems (improved), Sensors (improved)

Large Turret (gauss cannon, light autocannon, improved fire control)
Pintle Mount (machinegun, front)

TRAITS

Autopilot (skill level)	—
Communications (range)	500km
Navigation (Navigation DM)	+2
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	—
Stealth (Electronics (sensors) DM)	—

AFV,
Off-Roader



HNAEFIR MILITARISED AIR/RAFT

TL	10
SKILL	FLYER (GRAV)
AGILITY	+2
SPEED (CRUISE)	FAST (HIGH)
RANGE (CRUISE)	3,000 (4,500)
CREW	2
PASSENGERS	4
CARGO	—
HULL	18
SHIPPING	4.5 TONS
COST	CR380900

ARMOUR

FRONT	8
REAR	8
SIDES	8



TRAITS

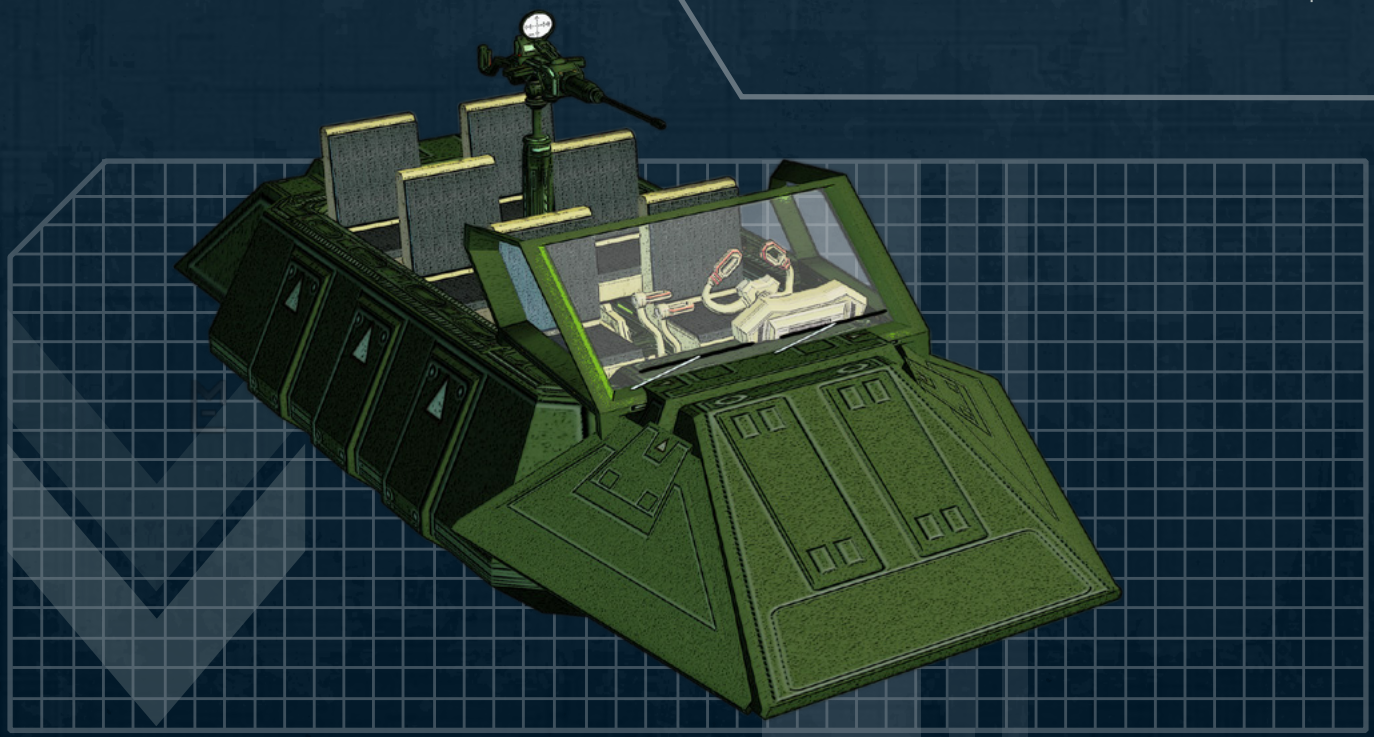
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Autopilot (skill level)	—
Communications (range)	500km
Navigation (Navigation DM)	+1
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	—
Stealth (Electronics (sensors) DM)	—

EQUIPMENT AND WEAPONS

Autopilot (basic), Communications Systems (encrypted, improved), Control Systems (improved), Fire Extinguishers, Navigation Systems (basic), Sensors (improved)

No weapons



P-984 ARMOURED PERSONNEL CARRIER

TL	10
SKILL	FLYER (GRAV)
AGILITY	+1
SPEED (CRUISE)	FAST (HIGH)
RANGE (CRUISE)	500 (750)
CREW	3
PASSENGERS	12
CARGO	0.5 TONS
HULL	80
SHIPPING	20 TONS
COST	MCR5.39

ARMOUR

FRONT	26
REAR	14
SIDES	14



EQUIPMENT AND WEAPONS

Anti-Missile System (minigun), Autopilot (enhanced), Camouflage (improved), Communications Systems (encrypted, improved), Control System (enhanced), ECM (improved), Fire Extinguishers, Life support (short term), Navigation Systems (basic), Passive Vehicular Protection System, Sensors (improved)

Small Turret (light autocannon, anti-air missile, enhanced fire control)

TRAITS

Autopilot (skill level)	2
Communications (range)	500km
Navigation (Navigation DM)	+1
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	–2
Stealth (Electronics (sensors) DM)	—

—



ST-1085 (SÄILIÖN TAPPAJA) TANK HUNTER

Rushed into production just after the end of the Fourth Frontier War, the ST-1085 is built on the chassis of the ubiquitous P-984 APC. The infantry transport area is filled with a penetrator cannon and its supporting power plant, projecting through a modified glacis plate on a very limited-traverse mounting. This is used to make minor adjustments, with the vehicle pivoting to align the gun. The remainder of the available space is used for ammunition, bracing for additional armour and an NBC protection suite for the crew.

The ST-1085 is officially designated a TL10 vehicle, although it requires guns manufactured at TL12 and brought to the assembly point. Shortages of penetrator cannon have resulted in a range of expedient variants including a laser armed one and a missile platform. These have yet to see major combat but are thought to be inferior to the original design.

Most systems of the P-984 were retained including the missile defence weapon and vehicle defence system, and the primary armour layout is the same. This has been enhanced with an additional layer of protection – some internal, some external and a new glacis plate. The crew configuration was altered to a two-man setup: driver and commander/gunner. This is inefficient in many ways but necessary to make the gun fit.

The ST-1085 is an extremely expensive vehicle but one of the few available that can pose a threat to Imperial grav tanks. It is very much an ambush hunter when tackling its intended prey but can be deployed as a fire support vehicle during an assault on a fortified area. Its heavy frontal armour allows the ST-1085 to face off enemy bunkers and smash holes in them, although its limited ammunition capacity requires frequent retirements to re-arm.

LT-1067 (LENTÄVÄ TAISTELULAITE) GRAV GUNSHIP

The LT-1067 is a gunship rather than a grav tank. It is fast and agile, capable of weaving in and out of tall buildings in an urban combat environment but is lightly armoured. Built around a plasma gun slung underneath in an oversized turret as long as the gunship itself, the muzzle projects well ahead of the cockpit. A long-barrelled plasma weapon slewed to the side can be a hazard when manoeuvring in tight spaces, so many pilots choose to lock the gun straight ahead and aim using the craft itself. However, official doctrine places the gun under control of the second crewmember who also handles sensor, electronic warfare and tactical planning operations.

The LT-1067 is only built on Gram and Sacnoth but used by numerous formations throughout the Sword Worlds. Its primary role is fire support of troops on the ground but is sometimes used to suppress aerospace defences ahead of or during a grav tank assault. The ability to fire almost directly downwards is useful in such situations and when operating in an urban environment the gunship will normally remain at a height where it is screened by taller buildings but able to fire on targets at a lower elevation.

LK-1001 (LUFTBURNA KAMPFORDON) LIGHT GRAV TANK

The LK-1001 light grav tank was put into production after the Fourth Frontier War and now equips many units throughout the Sword Worlds Confederation. It is built around a gauss cannon mounted in a large turret atop the wedge-shaped hull, with a co-axial laser cannon for dealing with softer targets. A secondary mini-turret mounts the laser anti-missile system, which can be manually directed at personnel targets if necessary.

Unlike smaller combat vehicles, the LK-1001 uses a fusion power plant capable of recharging the fuel cells of any other vehicle. A variant built on the same chassis, with the turret and weapons removed, is in service as a charging vehicle and with armoured recovery units, permitting a disabled tank or other vehicle to be fed power even if its own systems are down.

The LK-1001 is not capable of taking on Imperial grav tanks but is optimised for fast raids into rear areas or attacks on supply convoys or similar softer targets. It is also an excellent fire support platform for lift infantry and grav cavalry formations. Armour is heaviest in the frontal arc, in keeping with standard tank doctrine, and additional protection is provided by the standoff decoy system. This can create a sensor-opaque blanket to screen an assault but is more commonly used during the subsequent retirement.

A force of grav tanks will ideally use terrain to hide its approach before hurtling into the enemy force and bringing about a fierce melee in which small size and aggressive manoeuvring offer major advantages. The decoy system can then be targeted within the combat area as the tanks break off, causing as much confusion as possible, or fired behind the retiring tank force to blind enemy sensors until the light tanks can get behind terrain.

ST-1085 TANK HUNTER

TL	10
SKILL	FLYER (GRAV)
AGILITY	+1
SPEED (CRUISE)	FAST (HIGH)
RANGE (CRUISE)	3,000 (4,500)
CREW	2
PASSENGERS	—
CARGO	—
HULL	80
SHIPPING	20 TONS
COST	MCR5.7

ARMOUR

FRONT	38
REAR	22
SIDES	26



EQUIPMENT AND WEAPONS

Anti-Missile System (minigun), Autopilot (enhanced), Camouflage (improved), Communications Systems (encrypted, improved), Control Systems (enhanced), ECM (improved), Fire Extinguishers, Life support (short term), Navigation Systems (basic), Passive Vehicular Protection System, Sensors (improved)

Fixed Mount (penetrator cannon, front, enhanced fire control)

TRAITS

Autopilot (skill level)	2
Communications (range)	500km
Navigation (Navigation DM)	+1
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	–2
Stealth (Electronics (sensors) DM)	—

—



Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Penetrator Cannon	2	12D	12	Cr500000	AP18	+3
Anti-Missile System (minigun)	0.5	2D	600	Cr1000	Auto 6	0

LT-1067 GRAV GUNSHIP

TL	12
SKILL	FLYER (GRAV)
AGILITY	+5
SPEED (CRUISE)	VERY FAST (FAST)
RANGE (CRUISE)	3,000 (4,500)
CREW	2
PASSENGERS	—
CARGO	0.25 TONS
HULL	32
SHIPPING	8 TONS
COST	MCR3.5

ARMOUR

FRONT	16
REAR	16
SIDES	16



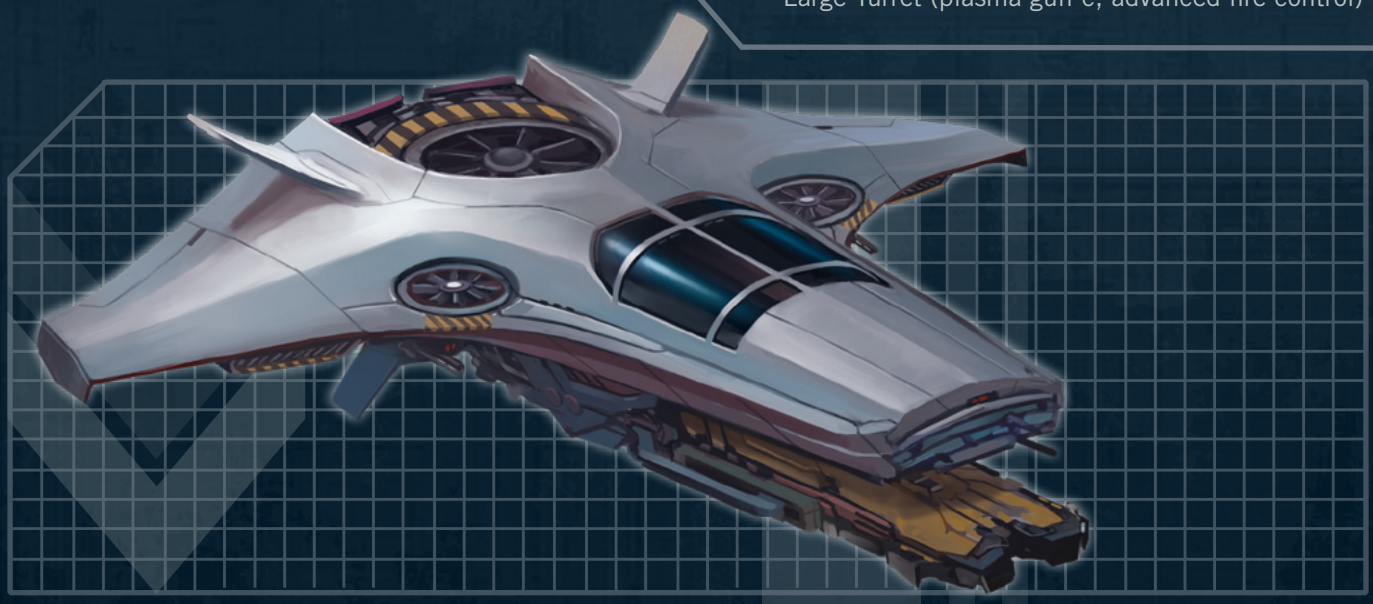
TRAITS

—	Autopilot (skill level)	+3
	Communications (range)	500km
	Navigation (Navigation DM)	+2
	Sensors (Electronics (sensors) DM)	+1
	Camouflage (Recon DM)	—
	Stealth (Electronics (sensors) DM)	–2

EQUIPMENT AND WEAPONS

Anti-Missile System (gauss), Autopilot (advanced), Communications Systems (encrypted, improved), Control Systems (advanced), Decoy Dispenser, ECM (advanced), Ejection Seats x2, Fire Extinguishers, Navigation System (improved), Sensors (hardened, improved), Stealth (improved)

Large Turret (plasma gun-c, advanced fire control)



Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Plasma Gun-C	10	2DD	—	—	AP 30	+4
Anti-Missile System (gauss)	1	3D	300	Cr2000	Auto 6	+2

LK-1001 LIGHT GRAV TANK

TL	10
SKILL	FLYER (GRAV)
AGILITY	+0
SPEED (CRUISE)	VERY FAST (FAST)
RANGE (CRUISE)	3,000 (4,500)
CREW	3
PASSENGERS	—
CARGO	—
HULL	72
SHIPPING	18 TONS
COST	MCR7.31

ARMOUR

FRONT	52
REAR	32
SIDES	38



EQUIPMENT AND WEAPONS

Anti-Missile System (laser), Autopilot (advanced), Communications Systems (encrypted, improved), Control Systems (advanced), Decoy Dispenser, ECM (advanced), Ejection Seats x3, Fire Extinguishers, Fusion Plant (advanced), Navigation System (improved), Sensors (hardened, improved), Standoff Decoy System, Stealth (improved)

Large Turret (gauss cannon, light laser cannon, advanced fire control)

TRAITS

Autopilot (skill level)	+3
Communications (range)	500km
Navigation (Navigation DM)	+2
Sensors (Electronics (sensors) DM)	+1
Camouflage (Recon DM)	—
Stealth (Electronics (sensors) DM)	–2

—



Weapon	Range	Damage	Magazine	Magazine Cost	Traits	Fire Control
Gauss Cannon	2	1DD	200	Cr1000	AP 10, Auto 3	+4
Light Laser Cannon	2	8D	—	—	AP 5	+4
Anti-Missile System (laser)	0.5	1D	—	—	Auto 3	+1

TRAVELLER

SWORD WORLDS

The Sword Worlds lie just beyond the Imperial border, a distinct cultural region settled long ago by refugees from a civil war. Theirs was a tough existence, but it produced a people both proud and resilient. Their history is one of internal and external conflict; wars for dominance of the Sword Worlds and wars against the Imperium.

Sword Worlds details the people of the Sword Worlds Confederation as they have never been seen before. Their motivations, their strengths and their weaknesses – along with the truth behind Imperial stereotypes of reckless spacegoing chauvinists, and the darker side of their culture.

This book examines how the worlds of the Confederation interact with one another, and how a technologically outmatched people have managed to stave off Imperial dominance for so long. Their armed forces are technologically simple yet incredibly resilient; their navy is very different to that of the Imperium. Minelayers, torpedo boats and orbital defence platforms defend the home worlds whilst battlecruisers raid deep into enemy territory.

Sword Worlds reveals secrets and little-known facts about the Sword Worlds Confederation. The Gimli endeavour, which strives to preserve Sword Worlds culture against any and all disasters; the Holmgang Compact, by which scores are settled illegally with honour. The Sword Worlders' near-obsession with their tragic hero Admiral Denisov, and the Lost Swords – colonies that may still exist far beyond known space.

The Sword Worlds Confederation is a complex place, and at times a dangerous one. The Sword Worlders themselves are misunderstood by outsiders but one thing is clear – they are proud and quick to anger, slow to forgive. The Sword Worlds is a region where only the brave should venture, and where courage is the key to success or a noble death… or perhaps both.

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