

TM

BATTLETECH

TOURING THE STARS



LONE STAR



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INTRODUCTION

ACCESS

We began on Terra, a lonely, blue-green speck in the vastness of the void. It has been more than a millennium since mankind ventured to the stars beyond home, and while it has been a tumultuous history—at the very least—we have discovered, explored, and conquered worlds that our ancestors could only dream about. Humanity now occupies more than two thousand worlds stretched across a vast range of interstellar space known as the Inner Sphere.

For humanity as a whole, Terra, at the heart of it all, will forever be known as “Home.” But for the far greater majority of us, “home” is a very different speck amidst the infinite black. Our homes are many, varied, beautiful, and filled with rich histories—each unique to itself.

In the grand scale of interstellar history, it often becomes so easy to forget this, to see planets and solar systems as dots on an abstracted map. But, at the core of the matter, each of those dots is a place where men, women, and children live, work, love, and survive. Join us on a special tour of the Sphere, as we explore the richness of these worlds like never before!

—Professor Bertram Habeas, *Touring the Stars: One World at a Time*, Free Republic Press

SORT A / B / C

Welcome to *Touring the Stars*, a campaign supplement designed to offer players the opportunity to learn about the worlds of the Inner Sphere, Periphery, and beyond.

The background information contained in the **Atlas** section gives players a world’s geography, history, notable events, and other tools needed to create an unlimited number of *BattleTech* games for play, while the **A Time of War** section offers plot seeds and details for the planet’s more notable events. These plot seeds can be used as stand-alone games, woven into an existing game or as part of a larger on-going campaign.

The **Rules Annex** section explains planetary *Atlas* information for use in gameplay, as well as optional terrain tables, weather, and flora/fauna rules. Terrain tables can be used as a random chart to determine gameplay maps, or simply as a guide to provide ideas on the types of terrain found on the world. This section also contains a list of other rules that can be used to enhance your game experience. All players should agree whether or not to use any or all of these features before play.

Note: The last four pages of this PDF are sized for 11" x 17" paper. Please keep this in mind when printing out the document.

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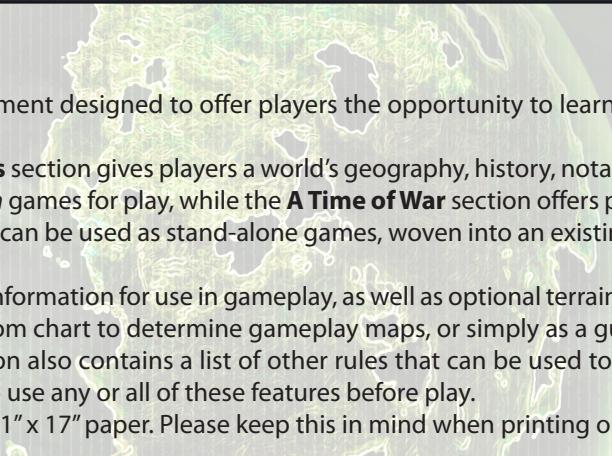
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STAR LEAGUE ERA



CLAN INVASION ERA



JIHAD ERA



SUCCESSION WARS ERA



CIVIL WAR ERA



DARK AGE ERA



ATLAS

ACCESS

LONE STAR

Star Type (Recharge Time): M1V (202 hours)

Position in System: 5 (of 12)

Time to Jump Point: 2.96 days

Number of Satellites: 1 (Vespa) (2450–2825);

None (after 2825)

Surface Gravity: 0.8

Atm. Pressure: Standard (Breathable)

Equatorial Temperature: 22°C (Arid, before 2800);

–5°C (Arid, after 2822);

Surface Water: 40%

Recharging Station: Zenith, Nadir (before 2780);

None (after 2780)

HPG Class: A (before 2780); None (after 2780)

Highest Native Life: None

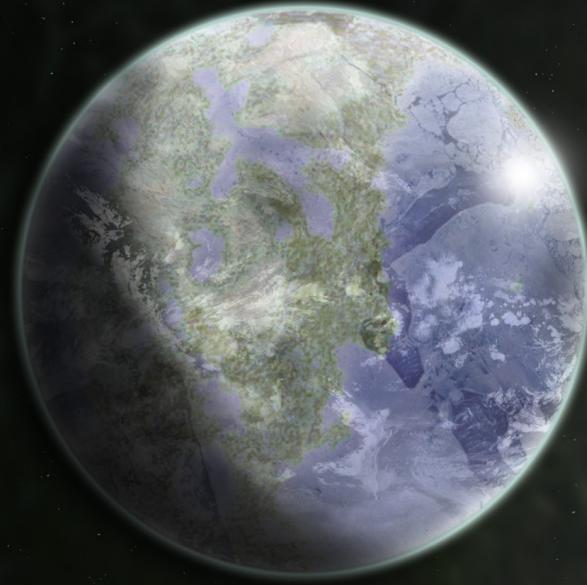
Population: 573,000,000 (2780); 25,000,000 (2822);

None (3150)

Socio-Industrial Levels: A-A-A-A-A (2780);

C-D-C-D-D (2822); N/A (3150)

Landmasses (Capital City): The Belt (Volgadon)



LONE STAR

Owing to its 120-year terraforming process, Lone Star was one of the last worlds settled within the Terran Hegemony. As a terraforming subject, Lone Star was especially challenging. Located well beyond its primary's conventional life zone, the planet was desperately cold, much like Mars in the Terran home system. Its atmosphere was thin and nitrogenous, with its modest water reserves entirely locked up in sheets of polar ice. Yet, despite the difficulties in establishing and maintaining a habitable climate, Lone Star was finally declared open for settlement in 2533. Part of the planetary terraforming effort even required moving a local asteroid (Vespa) into orbit to host a skyhook and mines.

The success of Lone Star's transformation was a matter of national pride. It also resolved some political issues in creating a new provincial capital world without the "baggage" of the much-older colony systems around it. By 2600, its population was in the hundreds of millions; its local industry was burgeoning, thanks to tax breaks and cheaper land than most of the Hegemony; and its agricultural sector was exporting a wide range of luxury foods.

Lone Star's land is concentrated in an unusual belt of continents that follow the prime meridian around the poles. These five linked landmasses all had formal names in the system's early settlement days, but the residents obstinately came to refer to the unbroken expanses as simply "The Belt." In its terraformed heydays, most of the world's free water came to be concentrated in two roughly circular, highly saline oceans (known to the locals as "Big Pond" and "Other Pond"), respectively situated almost antipodal to each other in the eastern and western hemispheres. The abundance of polar land, and Lone Star's low axial tilt, produced large ice caps

that came to serve as its settlers' principal source of fresh water. The large continental interiors, meanwhile, were hyper-arid, with terrain varieties spanning the gamut of deserts found all across the Inner Sphere: hot ergs, chilled rocky plains, saline wastes, dry mountains, and more. Today, of course, these continents and oceans are mostly covered in ice.

Before its fall, Lone Star had some regions with very pleasant climates and its populations largely concentrated in those areas. In 2765, the planet's 573 million residents lived in nine major metropolitan regions. Eight of these dense metropolises (collectively called "The Pond Cities") were located along the northern and southern temperate-zone coasts of the Ponds, with four cities per ocean. Those regions boasted temperatures moderated by the oceans and fed by abundant freshwater, either collected from ocean-driven precipitation or supplied by the polar meltwater rivers.

The preplanned Pond Cities were compact for their populations, an arrangement driven by land-price analyses by Lone Star's development corporations: dense urban areas saw faster price growth than typical colonial sprawls across low-cost rural lands. To maximize their economic and political power, the first planetary government used its zoning powers to bottle up its settlers and their descendants in the Pond Cities. By 2765, each of these cities claimed over fifty million residents in its soaring skyscrapers and arcologies. Yet, despite some off-world depictions, individual accommodations were spacious. Multi-tiered transit systems of buses, trains (both underground and elevated), and VTOLs provided reasonably swift movement for the huge populations. There were no suburban sprawls around the cities; they transitioned immediately to nature preserves and farm fields.

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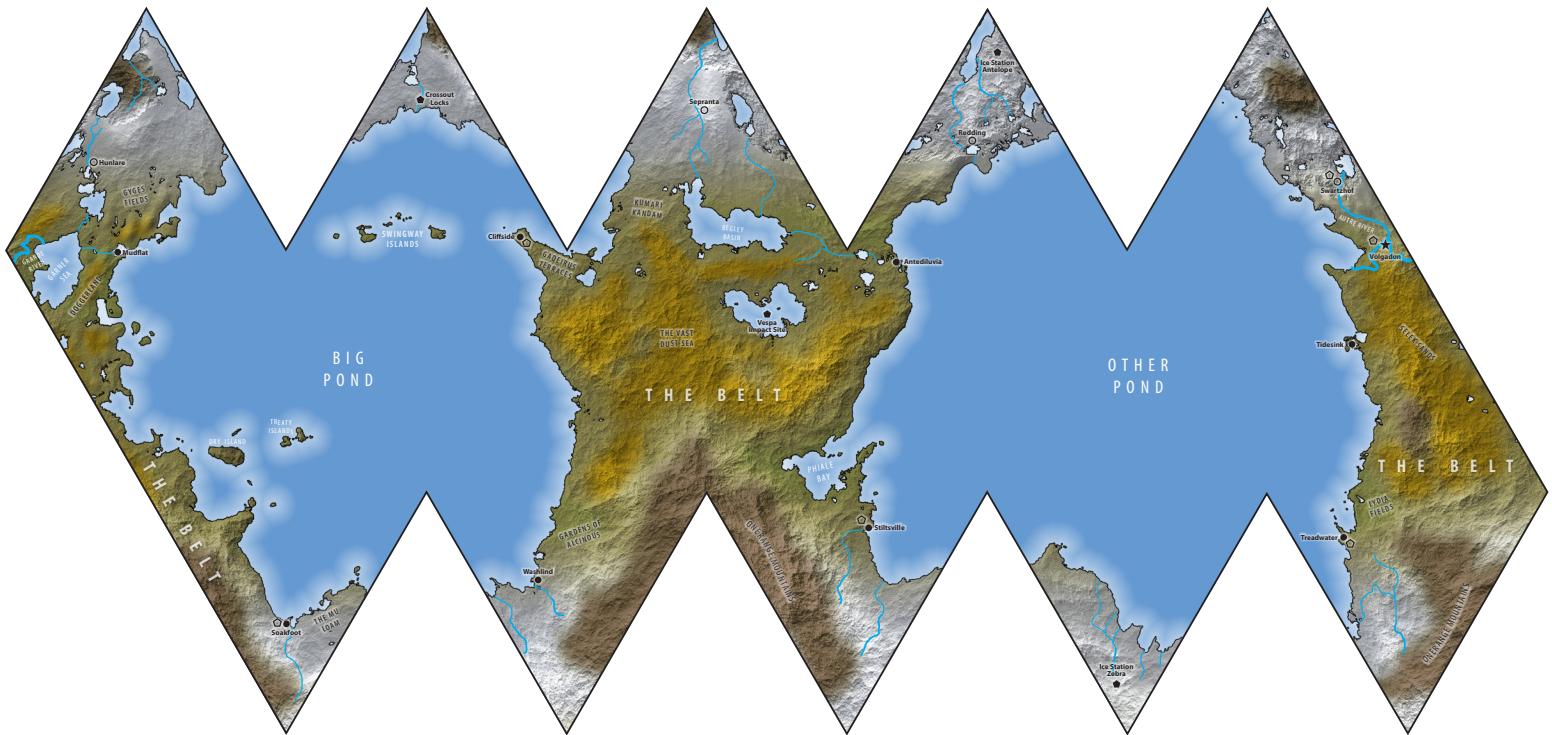
All eight Pond Cities were also unusual in layout thanks to the enormous tides generated by Lone Star's sun. These swells could often rise more than twenty times as high as those of Terra's lunar tides; although the pull of the system's fourth planet had prevented tidal locking, Lone Star had a rotational cycle fifty-six hours long, and thus possessed slow tides. For coastal cities, this prompted several adaptations. Four of the Pond Cities sat on natural and manmade highlands along the coasts. Among them, the city Cliffside on Big Pond frequently won architectural awards for the dramatic arcologies it built along its granite cliffs. By comparison, three other cities favored columns and pilings that enabled them to rise above their estuaries and tidal flats. The cunningly named Stiltsville on Other Pond made a point of incorporating its massive pilings into its architecture, rather than trying to hide them as simple foundations—a feat that inspired the brutalist "Big Iron" architectural style that became popular in the mid-twenty-seventh century. Finally, the Pond City of Mudflat took a more confrontational approach, pitting the Hegemony's engineering against nature by expanding into the tidal zones with sealed buildings, dykes, and "amphibious infrastructure" designed to either survive or prevent daily submersion. It was normal for dykes to be made of ferroglass, so residents could stroll beside transparent walls of high tide water, while the sealed lower floors of buildings would continue normal business as fish swam outside their windows. Lone Star's dramatic tides even served its electrical needs, providing a lower-cost alternative to fusion power.

Inland from the surging seas, the Pond Cities grew crops in abundance, supporting herds of free-ranging farm animals that

give "Loners" (as the planet's inhabitants referred to themselves) a meat- and dairy-rich diet unknown on less fortunate worlds. With no native ecosystem to protect and rich soil produced as a byproduct of terraforming, Lone Star's agricultural sector cultivated a complicated mix of plants and animals originally imported from many worlds across the Hegemony.

Lone Star's ninth metropolis was its capital city, Volgadon, situated at a narrow point in The Belt within the planet's northeastern quadrant. Volgadon straddled a low continental divide between the two major polar rivers (Grande and Autre) that drained to Big Pond and Other Pond, respectively. The city was built around a large, elaborate canal-and-lock system that linked Grande and Autre, effectively tethering the two oceans together. Despite having much less water coverage than Terra, Lone Star was highly dependent on inexpensive water transport because of its cities' concentration around the Ponds. Volgadon's canals thus provided a final, critical link to global trade. Predictably, the savage fighting between Stefan Amaris and SLD forces destroyed these canals, which would not be repaired until 2783.

Volgadon was an oasis on The Belt, but grew little food for itself. About once every eight weeks, Lone Star's sixty-day year and axial tilt warmed the north pole, which caused cold, humid winds to roll off the northern icecap and across the deserts, delivering fierce, days-long dust storms to the region. Lone Star's slow rotation did little to deflect the southern march of these storms. This plant-suffocating, ultra-fine halide dust made it impossible for local farmers to compete effectively with their Pond City counterparts, who did not need greenhouses and dust canopies. Thus, the capital's economy was dominated by its public



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sector, electricity production (cascades of dams on the two watersheds produced abundant power), and tourism on the manmade, tide-free lakes behind the dams.

While Lone Star's population lived primarily in the urban zones, there were other cities and towns scattered elsewhere. These much-smaller cities included the likes of mining cities, such as Swartzhof (which was destroyed during the SLDF's liberation effort).

One of the advantages that made Lone Star an agricultural exporter and regional capital for the Hegemony was its short transit time. DropShips could reach the planet, exchange cargos, and return to the jump point all within the span of a conventional JumpShip's recharge period. Because the local sun was relatively dim, clusters of recharge stations were constructed just inside the proximity limits of the zenith and nadir points and—prior to the Amaris Coup—were home to Star League Navy's Second Star Squadron. These facilities, further protected by the system's SDS network, became primary targets for the SLDF during its liberation campaign. Lone Star was never able to afford to replace the stations before its final environmental collapse.

The short transit distance and least-inflated land prices of the Hegemony also made Lone Star a favored site for export-oriented manufacturing. By the Star League Civil War, Loners were making a wide range of "background" components (from computer parts to myomers) used in many other industries across the Star League. The planet's business community was particularly adept at securing contracts for the Territorial States of the Periphery. Lobbying the small, oft-overlooked Star League offices that managed Periphery affairs could get new restrictions placed on the Canopian, Concordat, or Outworlds production of certain high-tech goods deemed "disruptive or insightful of secessionism." With an inside track on such upcoming restrictions, Lone Star's manufacturers would position themselves to become the primary suppliers for those goods. A wide range of vital technologies from fusion reactors and JumpShip drive controllers to computers, medical scanners, and so forth, were built on Lone Star for Periphery export. While this practice was not limited to Lone Star, this world did excel at it; the Periphery realms did not appreciate being so "economically enslaved" to slipshod factories six months and more away from their borders, but had little option.

While Lone Star's civilian population started with a weak majority in favor of Stefan Amaris' reign, the new, Director-General of the Hegemony enjoyed only the most fragile grip on this opinion. The use of terrorist bombings and chemical attacks to eliminate SLDF forces and loyalist militia regiments left Loners wary of the new regime, and some even formed resistance cells. When Kerensky finally liberated the planet in a campaign that ran from 2772 to 2774, each of the Pond Cities

had suffered at least one WMD attack. With most of its agricultural zones suffering damage from biological weaponry, and roughly three-quarters of its herd animals killed off, Lone Star's agricultural output was as devastated as its cities' once-vast manufacturing districts. Worse yet, the quick battle to seize Vespa wrecked the station-keeping drives it used to maintain the asteroid-moon's orbit against the tidal influences of the sun and Lone Star IV.

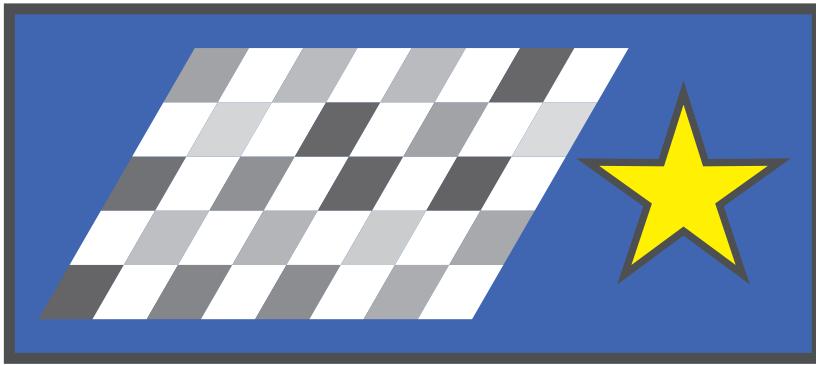
In the thirteen years since its liberation and the onset of the First Succession War, Lone Star made little progress toward recovery. Not only had it suffered severe damage to its industry and cities, its

planetary government was a wreck, and tens of millions of wartime refugees struggled to survive without even the most basic support. Like many Hegemony worlds, Lone Star's people violently threw from office anyone who had served in government during Amaris' rule, and the SLDF proved unable to spare any personnel to manage the world's day-to-day affairs.

Private businesses and House troops were able to re-establish some basic services and security in the absence of government interference, but with the lack of regulation, even these efforts were hindered by corruption and price-gouging.

The post-Amaris government of the Terran Hegemony only made matters worse for Lone Star. In attempting to coordinate the recovery of its war-torn worlds, the crumbling interstellar bureaucracy often managed only to completely deprive vital resources to some planets in vain, misdirected efforts to meet the needs of others. Like many, the people of Lone Star were aghast when General Kerensky launched his Exodus. However, it followed the lead of nearby Inglesmond in eschewing Hegemony-wide needs over those of its regional community. The Lone Star Province would rebuild itself—hopefully deterring the adventurous Houses at the same time—and then aid its fellow Hegemony remnants. This plan might have worked had the First Succession War been longer in coming, and far less devastating in scope.

After several initial defeats at the hands of Hegemony militias in the Lone Star Province, the Houses took different approaches in their efforts to annex the area. For the Lyran Commonwealth, this meant stepping up its diplomacy with worlds suffering from Combine raiders. For the Draconis Combine, it meant "taking off the kid gloves" by destroying the shipyards at nearby Inglesmond. Lone Star itself did not escape the Dragon, either. Kuritan agents released bioweapons on the planet's polar ice caps, which specifically targeted the specially engineered flora and algae that made it possible for terrestrial life to survive and thrive on the planet. These toxins in turn spread toward the interior reaches via the bimonthly dust storms. Without directly killing a single Loner in battle, the so-called "Dragon Plague" thus undermined the world's



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artificial ecosystem. The plague took a couple of terrestrial years to run its course, during which time Lone Star's populace concentrated all possible efforts on preserving the plants that helped maintain Lone Star's environment. So engaged by this effort, the planetary government could only surrender when DCMS forces finally threatened a full invasion in 2789. As a "reward" for this bloodless capitulation, the Combine provided several atmospheric processors to the Loners, most of which were destined for the surviving Pond Cities.

House Kurita found little of value in Lone Star beyond the glory of conquering another Hegemony world. Having been ravaged so badly in the Civil War, the local industries could produce little of strategic value for the Combine's war machine and so the planet received little protection from the military that only recently threatened to force itself upon it. Because of this, Lone Star suffered a devastating blow when Lyran raiders destroyed the still-incomplete atmospheric processors in 2803. The terraformed environment began an irrevocable slide back into its frigid, pre-human state as the artificially-maintained greenhouse effect collapsed, and the population dwindled as a two-decade exodus followed. Within a few years, virtually all local agriculture (using plague-resistant crops) ground to a halt, and the

millions who had yet to evacuate began starving to death. By 2822, Lone Star's population was less than four percent of its pre-Amaris levels. ComStar, which had never managed to re-establish HPG services on the destitute world, wrote the world off its maps in 2824.

As if death by starvation were not enough, one last tragedy remained to befall Lone Star: Vespa was going to hit the planet. Without the giant station-keeping drives that kept the tiny moon in a stable orbit, its orbit became increasingly eccentric. In 2825, the fifteen-kilometer asteroid struck the surface with an impact greater than the "dino-killing" Chicxulub impact on ancient Terra. Although none of the planet's major population centers was directly hit by Vespa's fall, the aftermath effectively destroyed what little of the global environment that could have been salvaged.

Today, unlike some other cases of failed terraforming, Lone Star retains a breathable atmosphere. Minerals in the crust are only slowly binding atmospheric oxygen at a rate of about one percent per millennium. However, it is a desperately cold world where the only surviving life are microbes at seafloor volcanic vents. Combine salvagers looted anything of value in the Second Succession War. Since then, only climatologists visit, and then infrequently.



A TIME OF WAR ADVENTURE SEEDS

ACCESS

WHAT A PLEASANT BREEZE

Recommended Group Size: 2-4 player characters

Recommended Group Type: Military

Recommended Skill Levels: Green-Elite (Key Skill levels of 2-8)

North of the capital city, on the banks of the Autre River, is Swartzhof, a city of 75,000 that has grown up in a district with a complicated geological history. In the district, ancient plumes of mantle-type rocks have intrusions of later, completely different volcanic deposits. The volcanism is a billion years dead, but it left behind a mineral cornucopia. Mining operations based in Swartzhof yield chromium, nickel, manganese, copper, gold, platinum, and related metals. Because free oxygen is new to the world, the deposits are not heavily weathered and easy to process into metals. (Some of the original settlers wanted to name the city "New South Africa," but the majority preferred to name it after an internationally famous pornography and action holovid star, Amelia Swartzhof, who was born in the district.)

Excellent transportation systems supported Swartzhof's enormous mining operations, including a large seaport on the river. With navigational improvements, Autre was an aquatic highway that could deliver 100,000-ton freighters to the capital of Volgadon and its lock system, which led to either ocean. There was also a large spaceport at Swartzhof, through which the city imported titanic mining machines and exported its mineral wealth. As a bonus, the local weather was often pleasant: cool, sunny, very dry, and often with a northerly breeze.

Despite the city's status as a mining and industrial hub, Swartzhof was strategically unimportant to planetary defense. Combined with the virtual absence of other population centers for two hundred kilometers in every direction, an invader could conceivably seize the area for nearly a year before the factories of the Pond Cities began to notice any shortfall of metals.

In 2772, the SLDF thought all of these conditions made Swartzhof a perfect beachhead for the world's liberation. But for the Amaris Empire's garrison troops, Swartzhof's isolation meant they could attack the assault force without restraint.

Complications: A few obstacles for players to tackle.

Look What I Can Do: In all the excitement at Swartzhof, the planet thought it would be a good idea to show its new visitors one of its famous dust storms.

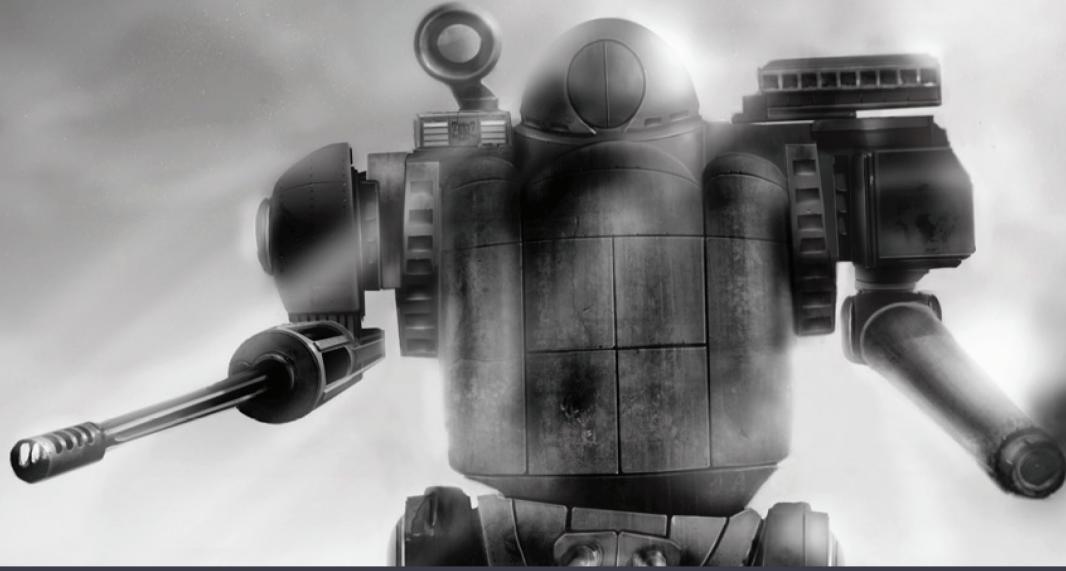
Only this one proved to be a once-in-a-century storm that would last for days. BattleMechs, aerospace fighters, and characters on the streets alike will have trouble seeing more than thirty meters. Historically, this drove Amaris' forces to blanket the city with bombs in hopes of catching some of the invisible SLDF invaders, but it is an opportunity for both sides to exploit.

Unexpected Guests: For most of the three days the 2772 dust storm raged at Swartzhof, both sides were prone to blundering into each other. Civilian sympathizers on both sides took to using the local communication network to report troop movements for their favored side, while opposing scouts often called in BattleMech, aerospace, or orbital fire support.

Tips: For *A Time of War* scenarios, this is an excellent opportunity to use respirators and look into the rules on illnesses and poisons (see pp. 245-249, *AToW*) to represent the "brown lung" effect of breathing in Lone Star's halide dust. *Total Warfare* and *Alpha Strike* combat scenarios should refer to the rules for Lone Star's dust storms on p. 12.



A TIME OF WAR ADVENTURE SEEDS



WHO WANTS TO TELL THE COORDINATOR?

Recommended Group Size: 2-8 player characters

Recommended Group Type: Military, Scientists

Recommended Skill Levels: Regular-Veteran (Key Skill levels of 2-6)

After diplomacy failed, the Houses began resorting to strong-arm tactics to annex worlds from the incapacitated Hegemony. This, among many other actions, eventually avalanched into the First Succession War. While common historical treatises on the First War focus on the titanic battles between the five House armies that ravaged the worlds of the former Hegemony, the truth was that there was a sixth combatant in the First Succession War: the Terran Hegemony itself.

The Hegemony never truly recovered from the Star League Civil War, in part because of widespread policies that banned anyone who served in government under Amaris' reign from serving in government post-Amaris. This prevented almost everyone with useful bureaucratic experience—from local governors to meter maids—from effectively doing their jobs. Their replacements were war-scarred, ideological novices who faced the nigh-impossible job of rebuilding a shattered realm while surrounded by enemies on all sides. These leaders did such a poor job that, in many cases, Hegemony worlds eventually came to welcome an allegiance with a neighboring House, or joined such realms after brief negotiations. Some planets, though, could not countenance a partnership with the avaricious Successor States, and so continued to try rebuilding themselves and their fallen Hegemony until they were forced to surrender at gunpoint.

Lone Star was one of the Hegemony loyalists. It attempted to form a coherent interstellar alliance with other Lone Star district worlds, though its poverty, shattered industry, and bumbling planetary government meant it could contribute little to the regional community. Nevertheless, when the Combine did arrive, its militia fought, and even managed to repulse the first raid.

If there was a little more time to expand the militia, or a little more success getting the world back on its feet, or planetary security had caught the Combine saboteurs dispersing bioagents on the ice caps, then history might have played out very differently.

Complications: A few obstacles for players to tackle.

Did They Loot a Mackie Museum?: As one of the poorer Hegemony worlds after the Civil War, Lone Star had to make do with older, second-hand salvage and export-grade equipment. On the other hand, a couple of companies of militia MCK-9H Mackies can ruin the day of DCMS troops sitting in their landing zones. Historically, one of the DCMS officers in the understrength invasion drew the unfortunate "honor" of informing Minoru Kurita of their failure against museum hardware (and was never seen alive again).

Ice Station Zebra: The PCs are DCMS, Hegemony, or planetary personnel who have annoyed someone enough to be sent to Lone Star's ice caps. DCMS forces will need to deploy dozens of multi-ton bioagent dispersal modules to catch the polar winds without the locals getting wise and stopping them. Hegemony and/or local forces would want to stop any activities being performed by invaders to their world. Local scientists studying the life cycle of polar bacteria, meanwhile, might just wonder what DCMS personnel are doing on their planet.

Tips: These scenarios can give a gamemaster a chance to exercise the *A Time of War* hostile environment rules (see p. 237, *AToW*), or pit Hegemony upgrades of elderly Age of War designs against Star League-era DCMS equipment.

A TIME OF WAR ADVENTURE SEEDS

ACCESS

SATAN'S MALLET

Recommended Group Size: 2-8 player characters

Recommended Group Type: Military, Technicians

Recommended Skill Levels: Regular-Veteran (Key Skill levels of 2-6)

Lone Star was a moonless world when humanity reached it, but the terraforming process—borrowing directly from Terra IV's Project Lowell—required a skyhook to gently deliver vast amounts of volatiles. Faster cometary deliveries of light elements would, ironically, slow the terraforming because their impacts would ravage the transforming environment for decades. Unlike the Phobos Skyhook, the resulting Vespa Skyhook was not in a truly stable orbit because of the influences of nearby planets and Lone Star's sun. And unlike the expansive Terran system, Lone Star's was very compact: no less than six planets orbited within 0.5AU of the sun, and there were twelve planets overall. These influences had prevented Lone Star's tidal lock to the nearby star, but also made moons (at least at Vespa's altitude) untenable. The Hegemony had addressed this with WarShip-scale fusion engines that supplied the micro-gravity thrust required for Vespa's orbital stability but the SLDF's liberation of the system from Amaris forces wrecked that stationkeeping drive. Within fifty years, Vespa's orbit had been pumped into a highly eccentric orbit that was grazing Lone Star's atmosphere.

2825 was the last chance to loot the frozen, dying planet, and both the Lyran Commonwealth and Draconis Combine knew it. Lone Star had been looted by many salvage operations during the First Succession War, all of which focused on industry, militia and SLDF stockpiles, and technically savvy survivors. What was left by 2825 interested only opportunists, mercenaries, and looters: the artistic and financial wealth of a Hegemony world, which had been uninteresting to the government salvagers before them.

Complications: A few obstacles for players to tackle.

It's A Small World After All: The well-known, well-mapped Hegemony planet meant that several groups of looters who showed up at the last minute might target the same Hegemony District Bank and Platinum Reserves, or the same Lone Star Museums of Expensive Antiquities and Overvalued Art. Hopefully, the characters brought enough guns to stake their claims.

Spare Some Rations?: ComStar said the world was dead and abandoned, so the characters felt no compunctions about visiting with cargo freighters meant to depart burdened with nothing but gold, gems, and artwork. Finding that survivor community near their salvage site could present a moral quandary.

Don't Forget Your Mittens: Even before Vespa's "asteroid winter," the collapsing greenhouse effect on Lone Star meant the planet was chilling fast. By 2825, temperatures in interesting salvage sites might be easily cold enough to strain characters' gear (or give their BattleMechs a much needed assist in cooling) at -40°C and below.

Say Chicxulub Three Times Fast: Pinning down the final impact of Vespa is difficult for many reasons, including the difficulty of modeling asteroid aerodynamics in the upper atmospheres of planets. Another issue is that after crossing Lone Star's Roche limit, Vespa has shed its regolith hide into an ever-evolving ring arc that is producing an erratic rain of debris and making it hard to track its several large metallic core fragments. Players should consider *Tactical Operations*' meteor shower rules (p. 56), earthquakes (p. 55), assorted wind conditions (p. 61) or, if a core fragment lands within 100 kilometers of their forces, the afterlife.

Tips: These scenarios can give a gamemaster a chance to exercise the *A Time of War* hostile environment rules (see p. 237, *AToW*) or *Tactical Operations*' terrain and weather conditions. And more than just rules, it's a chance to run characters through a desolate, frozen wasteland of once-wealthy cities under the clock of a continent-shaking doom.

RULES ANNEX

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The following section is designed to assist both players and gamemasters with guidelines and reference tables for using Objectives to create games and/or campaigns based on the target systems, factories, or cities described herein. The following rules primarily rely on the players' understanding of the core game rules found in *Total Warfare* (TW) and *Tactical Operations* (TO), but additional references may be made to *Strategic Operations* (SO).

Players and gamemasters alike should realize that these rules are substantially less rigid than core rules. Players creating tracks and scenarios using the material in this annex are encouraged to accept, modify, or even completely ignore these guidelines if they prove too cumbersome.

USING PLANETARY DATA

The planet in this supplement is presented with a block of basic planetary data. This data provides key details that players can use to further tailor their game play, reflecting the unique features of the world. The following information identifies the core rules that apply, based on the indicated world data.

STAR TYPE, POSITION IN SYSTEM, TIME TO JUMP POINT

These lines are most pertinent to the advanced aerospace aspects of gameplay defined in *Strategic Operations*, and will generally have no impact on games that focus entirely on ground combat.

Star Type identifies the color, size, and stability of the world's primary star, as well as how long an arriving JumpShip requires to charge its K-F drive while in system (using only its jump sail). Particularly large and/or unstable stars can be prone to odd lighting effects that can affect combat, such as glares and solar flares. Rules for Glare and Solar Flare effects may be found in *Tactical Operations* (see p. 58, TO).

Position in System indicates how many orbital positions away from the star the world orbits; an "orbital position" may be held by other planets or asteroid belts.

The *Time to Jump Point* indicates how many days' worth of travel DropShips accelerating (at 1 G, the same acceleration produced by gravity on Terra) would take to travel from the system's standard zenith or nadir jump points to the world. This transit time includes a mid-point turnover and 1-G deceleration rate as well, which are standard transit rates to and from most worlds. Longer distances between the world and its local jump point mean longer transit times for incoming vessels and thus more time for local defenders to arrange defenses once they realize there are inbound attackers.

NUMBER OF SATELLITES

This line indicates how many natural satellites (moons) the world has (and their names, if applicable). Many orbital facilities may be found in the LaGrange Points (regions where the gravitational forces between the planet and its moon or moons cancel each other out), and some of these same points (specifically, places near the L-1 points) are occasionally used as "pirate points" by daring raiders who wish to radically cut down transit times and local defense preparations. In night combat situations, worlds with one or more moons or rings may produce lighting effects caused by solar reflections off the lunar surfaces (depending, of course, on lunar phases), while worlds without any moons at all may present equally distracting effects. To reflect these possible effects as applicable, see the Full Moon Night, Moonless Night, or Pitch Black rules, on p. 58 of *Tactical Operations*.

MAPSHEETS TABLES

VOLGADON*	D6 Result	Map
	1	Lake Area (BT, MS2, MSC1)
	2	River Valley (MS2, MSC1, HPLR)
	3	City (Suburbs) (MS6, MSC2)**
	4	Scattered Woods (MS2, MSC1)
	5	Wide River (BT, MS6, MSC2)
	6	BattleForce (MS6)

*Volgadon is vulnerable to the Lone Star dust storms described on p. 12.

**Place Light and Medium buildings of varying heights in each clear non-paved hex.

SWARTZHOF*	D6 Result	Map
	1	Wide River (BT, MS6, MSC2)
	2	City Street Grid/Park #1 (MS4)**
	3	Large Lakes #2 (MS4, MSC1)
	4	Desert Mountain #1 (MS3, MSC1)
	5	Open Terrain #1 (MS5, MSC1)
	6	Wide River (BT, MS6, MSC2)

*Swartzhof is vulnerable to the Lone Star dust storms described on p. 12.

**Place Light and Medium buildings of varying heights in each clear non-paved hex.

POND CITY*	D6 Result	Map
	2	CityTech Map (MS2, MSC1, HPCR)
	3	City (Skyscraper) (MS6, MSC2)
	4	Coast #1 (MS7)**
	5	Coast #2 (MS7)**
	6	CityTech Map (MS2, MSC1)**
	7	Large Mountain #2 (MS5, MSC1)***
	8	River Delta/Drainage Basin #1 (MS4, MSC1)**
	9	River Delta/Drainage Basin #1 (MS4, MSC1)**
	10	City (Skyscraper) (MS6, MSC2, HPCR)
	11	City (Downtown) (MS6, MSC2)
	12	City Street Grid/Park #2 (MS4, MSC1)

*Place Light, Medium, and Heavy buildings of varying heights in appropriate paved hexes.

**Treat all depth 0 water as Mud (see p. 50, TO) and all clear terrain as Swamp (see p. 51, TO)

***Treat all elevation changes as sheer cliffs (see p. 39, TO) unless the hex has pavement.



RULES ANNEX

ACCESS

SURFACE GRAVITY

Surface Gravity has a distinct affect on the performance of virtually all combat units in game play. Values higher than 1.00 reflect worlds where units are significantly heavier than they are under normal Terran gravity, while values lower than 1.00 reflect worlds where units are significantly lighter. The full effects of gravity on combat may be found on p. 55 of *Tactical Operations*.

ATMOSPHERIC PRESSURE

This detail describes the relative density and breathability of the local atmosphere, and can have a profound impact on game play if the atmosphere is anything but "Standard (Breathable)." Thinner or Thicker atmospheres can affect the use of several unit types in gameplay and may even have an impact on weather conditions. Likewise, atmospheres classified as Tainted or Toxic can affect how various combat units' function and suffer damage in game play. For rules covering Atmospheric Pressure, see pp. 54-55 of *Tactical Operations* for pressure variations, and p. 56 of *Tactical Operations* for Tainted and Toxic Atmosphere effects.

EQUATORIAL TEMPERATURE AND SURFACE WATER

A world's Equatorial Temperature helps define whether the world can be broadly classified as hot, warm, or cold by indicating the temperate (in degrees Celsius) it averages at the equator—typically the warmest region on the planet's surface. Temperatures at the north and south pole of most worlds may average as much as 30 degrees colder than at the world's equator, but it is always important to know that local conditions such as weather and terrain can vary these averages somewhat. Nevertheless, the equatorial temperature helps players gauge whether much of the world will likely be arctic, tropical, desert, and so forth. If gameplay falls in regions where temperatures are extreme (below -30 Celsius or above 50 Celsius), Extreme Temperature rules (see p. 62, TO), will apply.

Surface Water reflects the percentage of the world's surface that is covered in water, and essentially defines whether the world might be covered in vast, lifeless wastelands, lush forests, or minuscule, rocky islands. Worlds with low Surface Water values (50 percent or less) will rarely see much rainfall or snowfall weather effects, and water or woods features on terrain maps may instead be considered sinkholes, craters, and rough terrain instead to reflect the lack of significant water sources and vegetation. Worlds with higher Surface Water values, meanwhile, will much more likely have active, precipitation-heavy weather patterns, and support more water and woods terrain features.

RECHARGING STATION, HPG CLASS, NATIVE LIFE, AND POPULATIONS

These details describe other noteworthy features of a target system that could affect campaigns to greater or lesser degree.

Recharging Stations describes whether a system has any space station capable of recharging a JumpShip's KF drive (and, if so, at which of the two standard Jump Points they are located). Recharging stations are often small and fairly unarmed, but also act as spaceborne hubs of trade and communication to the local world. Raiders often avoid these stations by taking non-standard jump points, so their arrival cannot be blown to the locals, but more significant invasions often begin by seizing the local recharge stations instead, to secure effective strategic control over the jump point.

HPG Class defines the presence of a local hyperpulse generator on the planet, indicating its ability to transmit signals to other systems nearby. Such stations are always located on the planetary surface, and are largely considered inviolate by all but the most serious attack forces. (Attacking an HPG is still considered a crime against humanity by most civilized realms.) Class A stations reflect major interstellar communications hubs, while Class B stations usually send transmissions in massive bundles less frequently. Although any HPG can send an emergency signal to a nearby system within hours of an attacking force's discovery, many raiders target worlds with Class B stations (or no stations at all), in the hopes that their arrival will raise the alarm among nearby systems more slowly. Assault forces, meanwhile, may target Class A worlds in an effect to secure a realm's communications hub and disrupt responses to a border-wide campaign.

Native Life describes (in very basic terms) the highest level of native-born life forms the world has. More life-barren worlds in the Inner Sphere may be host only to microbes or plants, while more evolved planets often host their own species of animal life up to and including mammals. Though this rarely impacts a planetary campaign, it cannot be ignored that many local creatures can pose a threat—or a boon—to raiders and invaders in some circumstances, ranging from being a source for local food in the event of supply shortage, or a hazard to establishing secure perimeters while operating outside of vehicular protection. This detail, however, does not cover introduced species the human population may have imported to the world, so while a target world may be host only to native-born trees, horses originally raised on Terra may yet make an appearance.

Population defines the number of humans estimated to be living on world. Worlds with particularly high populations—those numbering in the billions—are often highly developed, with many major cities. Sparsely populated worlds—with populations in the millions or less—are less likely to have major cities than they are small towns or even tiny outposts and domed arcologies. As a more densely populated world often raises the threat of local armed resistance or merely more eyes to spot incoming invaders and more voices to raise an alarm, raiders tend to target lower populace worlds, while invaders often attempt to secure the greater manpower and infrastructure reflected in high population worlds.

SOCIO-INDUSTRIAL LEVELS

The world's Socio-Industrial Level is a five-letter code used to broadly define the world's level of wealth and development using a series of classic A-F letter grades. The more "A's and "B's that appear in this code versus "D's and "F's will generally denote a world that is more self-sufficient, technological sophisticated, and resource wealthy than the average. As many of these factors can be used to enhance role-playing aspects of game play, an in-depth explanation of this code structure may be found on pp. 366-373 of *A Time of War*.

LANDMASSES AND CAPITAL CITIES

The major landmasses (continents, regions, and/or island chains) identified on each world are then listed, with the planetary capital city listed (in parentheses) beside the name of the landmass where it is located. Traveling between landmasses often requires the use of high-speed rails (overland), aerospace transit (via DropShips, airships, and other aerospace craft), or seagoing vessels.

OPTIONAL RULES

ACCESS

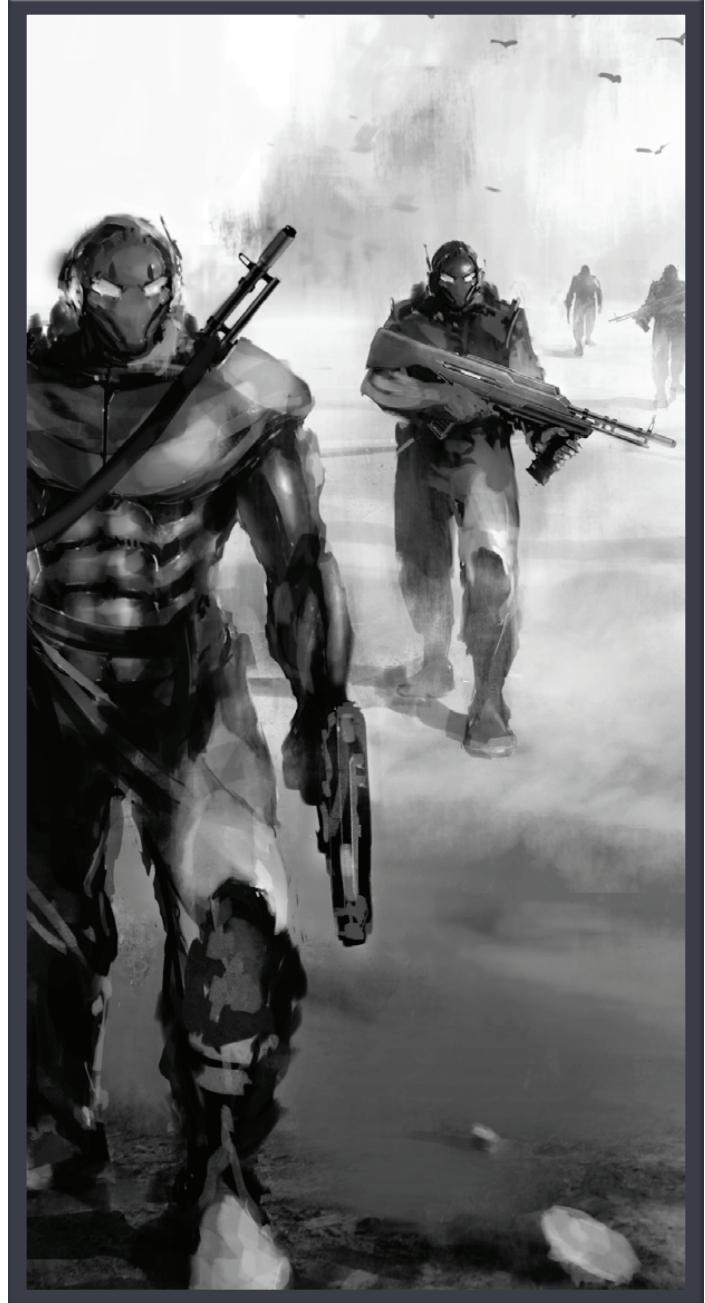
The following additional special rules are intended to provide further flavor to games set on the world featured in this supplement. For the most part, these rules may be considered advanced and optional, as they primarily reflect conditions and/or features unique to this one planet or planetary system.

LONE STAR DUST STORMS

A likely target for any invaders of Lone Star is the capital city Volgadon. However, about every two months (i.e., once per local year, during the summer), winds blowing down from the northern pole generate continent-blanketing storms of fine saline-rich dust. (This also happens a month later from the south pole, but only a few hermits and mining facilities lie in the path of Lone Star's southern dust storms.)

Long-Term Effects: In the long term, these dust storms can clog engines, cause respiratory ailments, and short out inadequately sealed electronics. Gamemasters may resolve these long-term effects by requiring any personnel and equipment exposed to dust (without suitable safeguards such as filter masks and environmental shielding) to make a 2D6 roll once for every full hour of exposure. On a result of 2, unprotected personnel will experience severe respiratory irritation the locals call "brown lung", while exposed electronics and engine components will become clogged or caked to the point of malfunction by dust particles. Equipment so effective will become non-functional until repaired by a successful Technician Skill check, with a -1 modifier to the dice roll. Personnel affected by "brown lung" will suffer a -1 Attribute modifier to BOD and STR scores, and a -1 dice roll modifier to all Skill checks for each time they suffer a "brown lung" roll effect. These "brown lung" modifiers stack, to a maximum of -3 per Attribute and Skill roll modifier, until treated with a successful MedTech Skill roll (with a dice roll modifier equal to the level of "brown lung" the character currently suffers) and a day or more of bed rest. If a character suffering from the maximum level of "brown lung" receives an additional "brown lung" effect result before being properly treated, the character goes into severe respiratory distress and becomes incapacitated. MedTech Skill checks needed to treat and stabilize a character in this condition will suffer a -4 dice roll modifier; if this roll fails, the afflicted character will go into acute respiratory failure and die within seconds.

Short-Term Effects: In the short term, a Lone Star dust storm will turn a battlefield into a short-ranged brawl, if opponents can find each other at all. If wind speeds are low (moderate gale or less), the effects of a Lone Star dust storm mimic those of Light Smoke (see p. 47, *TO*) that will blanket all outdoor and/or exposed areas, and will be found up to 100 levels above the underlying terrain. In heavy gale or stronger wind conditions, heavier sand particles will compound these effects, adding the Blowing Sand condition (see p. 62, *TO*) as well.



DISPLAY

A

B

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LONE STAR

