GAME MANUAL



MATRIX GAMES

V1.2 | 03.23.2023

VR Designs

CONTENTS

System Requirements 4
Installation 4
Uninstalling the game 4
Product updates 4
Unified Login System 6
Game forums 6
Need help? 6

1. INTRODUCTION 7
1.1. Your challenge 7
1.2. Word from the designer 8

2. THE GAME UNIVERSE 10
2.1. The timeline 10
2.2. On the Shadow 21
2.3. On Technology 25

3. THE INTERFACE 26
3.1. New game 26
3.2. Game Loop 33
3.3. The Map Screen 33
3.4. The Map 35
3.5. The Top Bar 42
3.6. The Top Tabs 42
3.7. The Left Bar 56
3.8. The Right Bar 57
3.9. The Bottom Tabs 70
3.10. The Management Screen 78
3.11. The History Screen 85
3.12. The Vidcom Screen 85
3.13. Various Popups 85

4. HOW TO PLAY 90

4.1. Basic Movement and Combat 101 90
4.2. Military Conquest 101 93
4.3. Building an Economy 101 107
4.4. Leaders and Factions 101 118
4.5. Logistics 101 127

5. THE RULES 139

5.1. Concepts 139
5.2. Planetary 151
5.3. Zones 163
5.4. Cultures 195
5.5. Assets and production 200
5.6. Regimes 212
5.7. Stratagems 246
5.8. Leaders and Factions 254
5.9. Special Story Modules 281
5.10. Units 282
5.11. Logistics 312
5.12. Models 327
5.13. Techs 340
5.14. Recon 353
5.15. Victory 356
5.16. On the Scale 357
5.17. Design compromises 358
5.18. AI rules differences 359

6. ADDITIONAL RULES 362

6.1. Air Forces 362
6.2. Oceania DLC 373

7. CREDITS 392

SYSTEM REQUIREMENTS

OS: Windows 8, Windows 10 (64 bit only)
Processor: 1.5 GHZ
Memory: 4 GB RAM
Graphics: 8MB video memory
Storage: 500 MB available space
Sound Card: DirectX Compatible 9 Sound Card

INSTALLATION

Please ensure your system meets the minimum requirements listed above. To install the game, either double click on the installation file you downloaded or insert the *Shadow Empire* DVD into your DVD-ROM drive. If you have disabled the autorun function on your DVD-ROM double click on the installation archive file, then double click on the file that is shown inside the archive. Follow all on-screen prompts to complete installation.

UNINSTALLING THE GAME

Please use the Uninstall option from the Apps section of the Windows Settings Menu or the Uninstall shortcut in the game's Windows START menu folder to uninstall the game. Uninstalling through any other method will not properly uninstall the game.

PRODUCT UPDATES

In order to maintain our product excellence, Matrix Games and Slitherine release updates containing new features, enhancements, and corrections to any known issues. All our updates are available for free on our website from the https://www.slitherine.com/member/mypage area and Games store page. It can also be downloaded quickly and easily by clicking on the Check for Updates link in your Game Menu.

We also periodically make beta (preview) updates and other content available to registered owners. Keeping up with these special updates is made easy and is free by signing up for a Slitherine and Matrix Games Member account.

When you are signed up, you can then register your Slitherine and Matrix Games products in order to receive access to these game-related materials. Doing so is a simple two-step process:

Sign Up for a Slitherine Group Member account – THIS IS A ONE TIME PROCEDURE; once you have signed up for an account, you are in the system and will not need to sign up again. Go to https://www.slitherine.com/register and fill in all available fields, when you're finished, click the Register button, and a confirmation e-mail will be sent to your specified e-mail account. Once signed up, access to betas and content to that game can be accessed via the store and my page areas.

Register a New Game Purchase – Once you have signed up for a Slitherine Group Member account, you can then register any Slitherine or Matrix Games title you own in your new account. To do so, log in to your account on either the Matrix Games website (www.matrixgames.com) or the Slitherine website (www.slitherine.com). Go to either https://www.slitherine.com/member/registerserial or https://www.matrixgames.com/member/registerserial and select the game you wish you register and enter the serial code in the field below. Click the Register button to register your new purchase. We strongly recommend registering your game as it will give you a backup location for your serial number should you lose it in the future. Once you've registered your game, when you log in to the My Page section you can view your list of registered titles. Each game will display your registered serial, Steam key (if applicable) and the file downloads location that will take you to all the latest public and registered downloads, including patches, for that particular title.

You can also access patches and updates via our Games Section https://www.slitherine.com/store or https://www.matrixgames.com/store, once there find the game you wish to check updates for, then check the downloads section. Certain value content and additional downloads will be restricted to registered members. So it is always worthwhile to sign up there.

Remember, once you have signed up for a Member Account, you do not have to sign up again and at that point you are free to register any product you purchase.

Thank you and enjoy your game!

UNIFIED LOGIN SYSTEM

Slitherine and Matrix now have a new "Unified Login System". This allows you to access the Slitherine and Matrix sites using just one username and password. If you have old accounts and wish to merge your accounts so that they work for our new sites, go to (http://samelogin.slitherine.com/) and enter the details of one of your accounts (ie. Either your Matrix or your Slitherine login). You will then be presented with the option to merge your accounts (listed as "[Merge my accounts]"), which will then allow you to combine any other accounts you have and/or generate a user for another website using the same details (for instance, if you were called "JohnSmith123" on the Slitherine site but had no account on Matrix, you could enter the details into the site and it would create a "JohnSmith123" account for Matrix as well, with the same password as the Slitherine login).

GAME FORUMS

Our forums are one of the best things about Slitherine. Every game has its own forum shared by our designers, developers, and the people playing the game. If you are experiencing a problem, have a question or just an idea on how to make the game better, post a message there. Go to the Slitherine website and click on the Community/Forums hyperlink.

NEED HELP?

The best way to contact us if you are having a problem with one of our games is through our Help Desk. Our Help Desk has FAQs as well as a dedicated support staff that answer questions within 24 hours, Monday through Friday. Support questions sent in on Saturday and Sunday may wait 48 hours for a reply. You can get to our Help Desk by going to

https://www.slitherine.com/member/helpdesk/ticket/new

This will open a ticket in our system and send an email to support@slitherine.co.uk.

1. INTRODUCTION

Welcome!

The Introduction chapter introduces you to the game, gives a personal word from the author and also includes some standard product paragraphs and disclaimers you'll find in any game manual. This manual is divided in five parts.

First of all this introductory chapter.

The second part is on the lore of the game universe. It's included to provide a background to the game universe.

The third part is on the interface. It goes over all the screens and windows and explains what most buttons do and most graphics signify.

The fourth part is on how to play. It tries to take a high-level approach (as opposed to chapters 3 and 5) and give you some sound advice on how to survive and prosper in *Shadow Empire*.

And the fifth part is on the actual rules. It is the longest chapter as well as the most detailed one.

In December 2020, Air Forces were added to the game. The relevant documentation has been added in a new section called "Additional Rules."

1.1. YOUR CHALLENGE

It is the year 8200.

More or less. It could be the year 8300 too. You are not 100% sure...

A huge Galactic Republic that existed for millennia and that comprised tens of thousands of planets has completely collapsed. Civilisation and technology fell from its apex to a post-apocalyptic low point.

It has now been several hundred years since the Dissolution War destroyed all human civilisation.

For you this "Galactic Republic" is just a distant and vague memory. All you have known in your life is hardship and war.

Chances are you'll be on a planet where water is more expensive than fuel and where even the air is toxic. Maybe you like to wonder what is out there between the stars? Even if you did… there is no practical use for that now. You have a much more important task at hand.

You have been given the opportunity to lead the small city state that you call home and that you have always served with honour.

With very meagre resources, enemies on all sides and situated on a (probably) hostile hellhole of a planet you have a very tough challenge ahead of you.

And (most) people are looking up to you for protection, the poor would like to stay alive and the powerful would like a road to power and glory. Can you make your people climb the ladder of civilisation and technology once again?

Can you keep your empire alive against the hostile forces beyond your borders?

Can you organize a government, an economy and a military?

Can you conquer and re-unite the Planet?

It is a daunting task, but plenty of opportunities and discoveries await.

Your subjects are standing by to receive your orders….

1.2. WORD FROM THE DESIGNER

Shadow Empire puts you in the seat of the supreme ruler of a small nation destined for greatness and reconquering the Planet. Or so you hope...

You have Leaders to help you govern your Zones, administer your Organizations and lead your armies. You'll also have Stratagems available that you can play on various targets.

It is in essence a game about military conquest, but you will also engage in diplomacy, budgets, organizational management, your economy, infrastructure, design and many more details.

The game has a very procedural design that will ensure re-playability and experimentation. Not only are the Planets procedurally generated, also the equipment you are fighting with is.

A separate system for discovery of Techs, Formation Types and Model Types and their research/development also ensures that you'll have to work with different playing pieces each game.

The game universe is designed to evoke the feeling of being on another planet in some dark future, but at the same time to stay familiar. It is a game that does not deny it is a game, but it has a strong thematic focus on keeping things relatively realistic.

The mechanics are complex and diverse, but it is not necessary to understand everything in order to play. In fact the philosophy is to allow somewhat effective play even without touching the majority of the systems. This should help get new players into the game at the start.

For a strategy game there is a relatively strong role-playing angle where you'll need to keep your Leaders happy in order for them to do their jobs well and not get any ideas of rebellion.

There is a lot of potential micro management to engage in and to offset this the game has Stratagems that allow sweeping actions by just clicking the 'Execute Stratagem' button. This allows a mental break from the micro-management stuff, for helping the player get out of a fix and enforcing the thematics as well.

This game is one of the most ambitious games I ever made. It has grown complex and that is why it took years to build and probably will take a few years more to completely fine-tune (don't be afraid, all complex games need a few more years to fine-tune, I am just stating it honestly).

However the result is a very rich experience and a unique game that is no cookie-cutter of something you have already seen before.

Due to the nature of the complexity of the game there are no editors provided. I know some people love this, but I assure you it is too complicated to bend your head around. I might see if I can add some content-addition editors in the future. But that is as far as my promises on editors will go. If you like modding, take a look at Advanced Tactics Gold or the Decisive Campaigns Community Project.

I am happy you decided to support me and buy *Shadow Empire*. I hope you'll enjoy the game. Feel free to drop into the forums or on my website to share your experiences with me.

Shadow Empire is already a really big game, but there remains much potential to add more features to it. If and when any extension of the game happens will depend on the interest the game generates among the players. But I am hopeful this will become the start of a long friendship.

Happy explorations!

Best wishes,
Vic

2. THE GAME UNIVERSE

This chapter only contains lore. It will help you with immersion into the game, but it is definitely an optional read.

When you start a game you'll find yourself the ruler of a tiny empire on a planet that is obviously not our own Earth.

How did you end up there?

It is time to take a brief look at the history of humankind between the 3rd and 9th millenia.

2.1. THE TIMELINE

So we start our history on a planet called Earth in the time of late industrialisation... The 21st century.

2.1.1. THE END OF US

In the late 20th and early 21st century, societies on Earth started changing. Not suddenly, but gradually. An older generation was slowly fading away and younger generations took over. The essence of what made the once fully free and democratic societies great seemed to have slipped between the fingers of their citizens.

Slowly but surely the once democratic parties started to become more oligarchic in nature and more and more intertwined with big business and big media. Equality before the law became something for the rich. Enterprise became impossible if you were small. Freedom of speech remained with the people for quite some time but only because the voices not worth listening to could easily be marginalized.

It was a new age of the super rich. The remaining middle was partly co-opted in the elite class, while its majority sunk into the ever increasing underclass. Governments started decreasing their level of activity due to the combination of mass unemployment, decreasing revenues and ever rising welfare costs.

The loss of equality and freedom was so gradual that the new generations just did not really notice what was happening since the process was already

in motion when they were in their formative years. Ideology and solidarity had become dirty words and it was probably the slow erosion of virtue that really opened the gates for the unscrupulous.

Halfway through the 21st century, the life of the average earth citizen had become very tough. Work was scarce, government benefits had dropped to below subsistence levels and organized crime had made a resurgence with a vengeance.

For the super-rich however times had never been better. Powerful families had spider-like webs of power and interest stretching out over all important companies and governments. They had retreated to the countryside where they had bought up huge areas, which they protected by government privilege or private militias. They basically founded their own states within the old nation states and the biggest among them housed hundreds of thousands of employees.

Medical technology had moved away from developing medicine for the masses and now focused on individual gene-based therapies and age prolongation treatments for the ultra-rich.

There was one big attempt at revolt in the year 2063. At this time, in theory, the West was still a democracy. A charismatic young European by the name of Karl Mainz managed to organize the oppressed and get independent media networks launched. He and his followers did everything right and it seemed that a landslide election victory for his movement called "Equality" could not be averted.

This was the moment where the beast took off its mask. The elections were postponed due to security concerns. The independent media networks of the "Equality" movement were simply put offline.

Realizing what was happening Karl Mainz went underground and denounced the crackdown as a "putsch" against democracy. He tried to rally the masses into an armed revolution to take back what was theirs. Most people however stayed home.

Tens of thousands did rally. In Berlin, Paris, New York and lots of other cities... and many did die or disappear without a trace...

It is hard to say why Karl Mainz did not get more support in taking down the now openly tyrannical governments and their conglomerate puppet

masters. It seemed the great majority of the people just valued their own safety above a restoration of the freedoms of the 20th century.

Emboldened by their success in crushing the opposition and the absence of willpower among their sympathizers, there was now no stopping the powers that were.

All pretence of rule of law was ended. National governments were stripped of most remaining power and basically became responsible for managing the great ghettos of Earth. The different national military forces either ceased existing or came under the direct command of the different commercial-industrial families and oligarchies.

It was the birth of the thousand years of peace.

2.1.2. THE THOUSAND YEARS OF PEACE

During the following centuries, the new world order proved itself incredibly stable. The poor struggled, worked and died in the now sprawling ghettos and the oligarchs and their cadres enjoyed an era of great technological growth and ecological recovery.

Power arrangements between the most powerful used to have been a shady and secretive affair in the 21st century, but in the 22nd century the shame and fear of public outrage had turned into a burning pride and it was in the year 2126 that the Earth Directorate Board (EDB) was formed.

During the remainder of the 22nd century all the rivalling families and oligarchies were brought into a new order resembling a grand feudal system. In the beginning the board functioned like a “primus inter pares”, a first among equals, but as time went by it got more and more powerful.

It was eventually in the late 23rd century that the Rule of Law (oh irony..) was officially introduced. Its main law was that every territory on the planet was given in administration to a specific corporation, oligarchy or family. The most powerful families manned the Board with “directors” and the less powerful schemed to improve their positions and get their family on the board as well.

In the meantime the living conditions of the common people had improved a lot. Increased centralization and the creation of the new territorial power bases for the corporate families had decreased military and economic conflict and increased stability and living standards.

By this time the 20th century was a long lost memory only kept alive by a few fringe philosophers. Nobody cared any more about the abstract concepts of "freedom" and "equality". These words were as alien to the people of the 23rd century as medieval meanings as "honor" and "chivalry" were alien to the people of the 20th century. The metamorphosis of the societies of Earth was complete.

One rose up in the ranks by obedience, capability and luck. And even if you had all three it still took many generations to move from the bottom to the top. Patience, endurance and acceptance had become the new virtues of the masses.

Technological advances slowed down until the tech levels got to a point of almost absolute stasis in the 25th century. People born in these centuries could see the 100 years of their lives pass by without noting any changes in culture, society or technology.

It was normal for post-25th century historians and philosophers to claim that the "Rule of Law" was eternal and nothing would ever change again.

Of course these philosophers were wrong. The system was remarkably stable, but as we all know: given enough time everything will change. Mountains will erode and suns will eventually burn through their last drop of Hydrogen…

The change started around the beginning of the 4th millennium. New generations of oligarchs had begun their rebellion against their parents by preferring science positions above management positions. They grouped in competitive societies and were once again spurring on research and making many new discoveries.

Their new culture of science obsession gradually became mainstream. Persuasion to adopt this new scientific culture was much aided by the profits some of these new scientifically successful families were generating.

2.1.3. THE COLONIZATION OF THE SOLAR SYSTEM

It was like a dragon had awakened. Territories and families that didn't keep up in the tech race soon found themselves sidelined on the EDB.

Although the renewed sense of ambition to bring change initially developed strictly under the new scientists it was soon spilling over… As a virus it jumped from the laboratories into the management rooms and military HQs.

And real ambition is ambition for power. You need to expand to get more power. But where to expand too? Take the holdings of other families? Break the Rule of Law? Nobody dared. A thousand years of peace had been maintained by this time and the idea of full scale armed conflict was almost considered heretical (although admittedly small scale raiding, inter-family feuding and proxy conflicts were still rather commonplace).

It was the year 3196 that United Industries (the Burton-Bright family) launched the first manned spacecraft in a 1,000 years. They and only a small number of other corporations (like Cassiopeia Conglomerate as well as the Wu family) took possession of the whole solar system in a matter of decades. From Mercury all the way to the Kuiper Belt, everywhere in the solar system human colonies and mining operations were being established.

It is important to stress the enormous shock of this sudden expansion and the resulting shifts in the power balance after centuries of stability.

Initially the majority of the EDB, the families without space tech, reacted to these space endeavours with scorn and laughter. However, when it became clear how much wealth and growth could be gotten in the vastness of the solar system they became envious. Very envious…

Many of these powers started up their own breakneck speed space programs, often at extremely high costs. But when they arrived on the far shores of the solar system they found that all real-estate of any value had already been claimed.

2.1.4. THE 1ST SYSTEM WAR

The hatred, frustration and envy of the families that had missed out finally turned to its only possible outlet: WAR!

The most powerful of the earth-bound corporations, families and nations conspired together into what later was to be known as the Earth League.

In the year 3270, the Earth League unleashed an overwhelming offensive on the Earth-based assets of the space corporations. Within days their holdings were neutralized or obliterated. The defeat of United Industries and the other space bound families and corporations on Earth was complete.

However the situation was the reverse off-planet. Here the space corporations retaliated immediately by taking possession of the handful of Earth League installations and nuking Infinity City on the Moon.

A stalemate developed in the years following the start of hostilities. The space corporations bound together under the leadership of United Industries and formed their own league: the Space League. The remaining independents on Earth were battered or threatened into collaboration with the Earth League. The EDB was for all intents and purposes replaced by a semi-secret small council staffed only by the leaders of the most powerful of the Earth League families and corporations.

The Earth League knew it was technologically behind, but it had one big asset: Earth. The production and man-power on Earth was enormous compared to what the young space colonies could muster. After several brutal 10-year plans, the Earth League military had managed to build up an enormous space fleet and unleashed it early in the 34th century.

What followed was 200 years of constant war. The war took a long time because of the distances involved. In the first half of the war the balance shifted every decade but eventually in the later part of the war, the production power of Earth changed the tide of the war permanently. Between the years 3,400 and 3,500 the Space League lost asteroid after asteroid and planet after planet and was starting to fight a prolonged retrograde operation.

Eventually in the year 3,611, after the conquest of Neptune and her moons, the Earth League claimed full victory. This was also the year that the Terran Empire was officially founded.

The small council that had been ruling Earth during the entire war appointed its first Emperor: Constantine I.

The remnants of the Space League had been fragmented by the constant defeats but had continued to fight on from the Kuiper Belt and, during the 2nd system war around 3750-3780, temporarily also from the Asteroid Belt.

Over the centuries that followed, the Terran Empire slowly evolved in a completely centralized and totally tyrannical state.

The Space League remnants (or the Remnant Clans as they called themselves by this time) managed to survive out in the immense vastness of the Kuiper Belt.

2.1.5. DISCOVERY OF THE WARP DRIVE

Although the Terran Empire made great progress in the sciences, especially genetics, cybernetics and in creating extremely advanced AIs (it was even

rumoured the last Emperor was an AI himself), it was the Remnant Clans that made the biggest discovery of all.

If it was the hardship that made them more creative, or if it was pure luck, or a combination, nobody will ever know. But the Remnant Clans managed to invent and build the first warp capable spaceships. It was around the year 4,000 that the clans started emigrating to the stars.

At this time the Remnant Clans had all but stopped fighting space guerilla operations against the Terran Empire. This happened at a time when there had been no contact between the Terran Empire and the Remnant Clans for centuries.

That was the reason the Terran Empire only found out (by chance!) what was happening 10 years after the first successful warp voyage. The Terran Empire was shocked into action and their full attention and immense power was now turned towards the outer fringes of the solar system.

Imperial historians called this the 3rd System War, but honestly... it was not much of a war.

Every time the mighty Terran Empire space fleet had drawn up its battle lines to assault a Remnant Clan they had to watch their enemy disappear into big bright lights of singularity when warp drives fired and carried their Remnant Clans out of the Sol System.

To Alpha Centauri, to Sirius, to hundreds of other systems. The Terran Empire fleet had no way to pursue them. They did not manage to capture a single warp drive ship from the Clans...

The Terran Empire made sure word of the migration of the Remnant Clans did not get out.

Only the highest level Directors were allowed to know and live.

2.1.6. TERRAN EMPIRE IN DECLINE

Over the centuries that followed the exodus of the Remnant Clans, the Terran Empire slowly changed even more for the worse and was becoming an evermore unpleasant place to live. Even with the most powerful AIs ever designed at its service it had not succeeding in repeating the discovery of the warp drive.

The constant fear that the Remnant Clans would multiply their numbers greatly and return one day turned the subsequent emperors bitter and paranoid.

Slowly halfway through the 5th millennium the rot really set in. Technological progress stagnated once more and knowledge started to fade away. A slow bureaucratic rot had set in as well. Once splendid extra-planetary colonies like Europa and Io were abandoned, populations and morale declined across the board.

2.1.7. THE GALACTIC REPUBLIC

In the meantime the Remnant Clans had colonized over a hundred different systems and had bided their time, only sending occasional single observation crafts to the outskirts of Sol every decade or so. In the 50th century they judged the time ripe to finally overthrow the Terran Empire and exact their vengeance.

They returned in force. Their space armada must have been over 10 times the size of the Imperial Fleet.

The dispirited Imperials of the still existing Terran Empire fought unexpectedly stubbornly. The last battle was bitter. So bitter that most of Earth and the solar system were completely destroyed.

Nobody knows what happened to the last emperor Nicodemus III. All evidence and record of what the Terran Empire had been up to before and during the battles was lost in nuclear fire.

The descendants of the Remnant Clans went on to found the Galactic Republic in the year 5111.

Under the supervision of the Galactic Senate, a great expansion took place. Outward they went from their core worlds. 1,000s upon 1,000s of systems were colonized and explored. And eventually they got connected by starlanes.

Under the Galactic Republic there were more than 2,000 years of peace and prosperity.

The Galactic Republic was a predominantly human empire. Any alien space-faring empires where either bypassed or destroyed (if they were proven violent). These alien empires encountered were initially relatively small until the contacts made during 7th to 8th millennium.

Some of the lesser developed alien races developed culturally during their "occupation", some of these species acquired full citizenship of the Galactic Republic, some tried to fight guerrilla wars, some gained independence and their own system(s).

The empire resembled a shape not unlike that of a wheel of Swiss cheese. The holes in this cheese are representing the alien cultures.

2.1.8. THE CREATION OF THE SHADOW

While the Terran Empire was isolated for over a thousand years, the successive emperors allocated increasing amounts of resources towards the research for eternal life.

This led to the development of a nano cloud construct technology; systems of tiny machines that each held a quantum-processing core. When constructed in large enough quantities they allowed for the downloading (actually copying) of a human conscience in them.

However, this technology was extremely expensive and took centuries to complete. It was eventually emperor Anubis (600 years before Nicodemus III) who was the first to have his conscious copied into a so-called Shadow Cloud by a process called Reversed Animation. His Shadow Cloud was kept in stasis during his human life as he belatedly realized his conscience had not actually been transferred but copied and he was terrified to be confronted with a superior version of himself. Upon his death he nonetheless transferred power to his Shadow Cloud instead of to one of his children.

All emperors that followed Anubis were mere puppets of his Shadow Cloud.

2.1.9. THE SLOW DOWN

It was in the 8th millennium that the Galactic Republic's continued expansion outwards started to slow down. The first cause for this slowdown was the encounter with several strong alien dominions that blocked obvious routes to further human expansion.

The second cause was that UCM Drive technological development had reduced to a snail's pace.

As the empire became bigger there was less and less interest for the interior systems to focus on expansion as the time needed to reach unclaimed planets was becoming ever longer.

The combination of these effects was that the powerful families, giant companies and wealthy individuals of the interior systems increasingly started focusing their ambitions on manipulating the Galactic Senate and increasing their power at the cost of other groups.

The masses organized in the Syndic faction and blamed the Galactic Republic as a whole for the increasingly dysfunctional senate.

The rich did the same by organizing themselves in the Reformist faction, blaming the Syndics and the Galactic Republic for spreading chaos and endangering the wealth and stability they had accumulated.

Anger and greed led to strife and strife led to conflict.

2.1.10. THE GALACTIC REPUBLIC'S POLITICS AND ECONOMY

In order to properly understand the coming Dissolution War you need to know a bit more of the core economy of the Galactic Republic at the end of the 8th millennium.

At this time, the Galactic Republic was at the pinnacle of its power (or just over it). It stretched over a 1,000 light years from one end to the other. Travelling from a frontier system to the capitol world of Keppler Capitol with the most high tech UCM Drive using star-lanes would take one almost 20 years.

Local planets had their own governments and planetary senates. They sent one or more physical senators to the Sector senate.

Sector capitol planets had thus their own physical sector senates with 100s of senators from all the planets in the sector.

The Galactic Senate was virtual and had senators from all sectors represented... 10,000s of them.

It was not a slow system since information could travel real time using the misunderstood Quantum Transmitter Technology (QTT - not suitable for actual solid matter, but entanglement principle ensured instant communication).

To comprehend the economy in the 8th millennium one has to realise that in this high tech era a lot of basic products were easily producible locally on every planet or within the system or sector.

Examples of local planet-to-planet trade are raw materials, food and local specializations like luxury products, industrial products, vehicles, simple spaceships and/or custom genetic products.

However, as with any advanced technology, even in the 8th millennium, the complexity involved with the highest tech resulted in a lot of specialization and a high level of interplanetary trade. The Galactic Republic had an interconnected economy on a massive scale.

2.1.11. THE DISSOLUTION WAR

As the first planet-versus-sector and sector-versus-sector wars started, caused by extremist factions winning control of local senates as well as some coups... and the first liquid energy refinery planet was destroyed there was a wave of panic spreading through the now severely dysfunctional Galactic Republic.

Sectors declared independence or ignored Keppler Capitol (the capital of the Galactic Republic) to focus on organizing their defences or counter-strikes.

Liquid energy was stockpiled and trade started grinding to a halt.

Let's repeat that last part: Trade started grinding to a halt. And that was really it. So simple but so devastating.

Thousands of planets started running into problems. Core industries were missing spare parts that could not be locally produced, Agricultural planets found themselves without trade partners, even worse: Industrial and Mining planets were missing their food imports.

Crisis hit almost everywhere through a series of shock waves.

Many local planetary and sector senates tried to maintain the calm, but midst all the panic and fear many were overthrown by Syndic or Reformist coups. In the end it didn't matter... even if local government survived they were forced to turn towards chaos.

In order to have a chance to survive, systems needed to take the most crucial of all missing resources like liquid energy from their neighbours who often did not want to trade them since they were experiencing the same shortages. And so hundreds of systems went to war with their neighbouring systems. More often than not destroying what they needed instead of obtaining it.

After the last of the liquid energy refinery planets had been destroyed, installations that had taken decades to construct even during the optimal conditions of the good old times were lost to the Galactic Republic. At this point it was basically a countdown to black out.

Some sectors or embryonic successor republics and empires managed to hang on for some decades by raiding and salvaging resources from neighbouring systems, but eventually even they ran out of plunder and the curtain fell for all of humankind.

A galactic industrial base that had taken thousands of years to build proved too vulnerable when it got severely disrupted.

The lower level fallback technology that would have taken sector governments only decades to construct never emerged. There was neither the peace, nor the time, nor the knowledge available.

2.1.12. AFTER THE APOCALYPSE

The present. It is the early 9th millennium if you are using the old Earth calendar.

However there are not many humans left who can still recall a memory of the existence of Earth.

After the great Dissolution War, humanity was thrown in a very deep dark age. For centuries only chaos, fragmentation, starvation and violence reigned on the once proud planets of the Galactic Empire.

It is only now that some small empires are emerging again. They are recovering ancient technology and bringing some order and civilisation back to humanity.

But it is still a hostile place on many a planet and survival for many a new nation will not be easy.

2.2. ON THE SHADOW

The Shadow does not seem to be present on the Planet you are playing on… Or is it?

In any case the effects of its meddling are still felt and you might want to know a bit more on the illusive topic of the Shadow.

Note that none of this knowledge is known by the actors and people inside the game.

2.2.1. THE ESSENCE OF THE SHADOW

A shadow cloud is theoretically self sustaining and truly eternal for all intents and purposes. However, it cannot expand itself after being constructed. Due to the quantum entanglements that have to be created just right at design time. Evolutionarily speaking, such a construct is of course an evolutionary dead end.

Theoretically it is possible to build different better and larger designs and copy the conscience of the older shadow cloud into the newer shadow cloud. However, the only shadow in existence, the shadow of emperor Anubis, does not want to become an obsolete model and refuses to consider any such attempts or any talk of his human subjects of creating other shadow clouds.

Over time, Anubis and his minions developed technologies to transfer part of his essence to his subordinates. Due to the nature of his being and the limited number of shadow nodes in the shadow cloud the number of humans he could co-exist within was limited. Anubis could only be divided so many times without losing his coherence. Anubis started to resemble a node-tree of distributed consciousness and became less and less human due to his further and further hierarchical extension as the centuries went by.

After the Terran Empire and Earth were destroyed everybody thought emperor Nicodemus III was killed as well. And actually he was, but that did not matter since he was merely one of the vessels for the shadow cloud. And that shadow cloud had survived mostly intact.

It took time for the remaining shadow cloud particles to find new humans to take over and "puppeteer", but eventually it did and with its new vessels he spread all over the Galactic Republic. Eventually the shadow cloud usurped hundreds of powerful people, but still: the Galactic Republic Senate was ruled by a distributed senate of hundreds of thousands of senators. The Galactic Republic was too vast for the Shadow Cloud to take over by brute force.

So instead of taking over the senate it made long term plans for a transformation of the political model of the Galactic Republic. It was very difficult and progress of the Shadows plans was very slow. However, when the Age of Slowdown started things were turning in its favour.

In the golden age of the Galactic Republic sowing discontent was difficult. There were too many good and unturned leaders that would not voluntarily undermine the Galactic Republic. And ambitious people preferred to turn that ambition outwards to the unexplored galactic reaches of opportunity.

However the slowdown, the accumulation of wealth with the rich and the rise of very expensive anti-ageing tech changed things.

The scheming of the Shadow gave rise to two powerful factions. One that it had created itself: the Reformists. This faction was basically composed of those who wanted more power at the expense of others, dressed up in autocratic law and order and efficiency-talk ideology. The other faction was in many ways the counter movement to the first: the Syndics faction. The Syndics wanted anti-ageing tech for all (and not only for the rich and powerful) and they proposed to get there by Incorruptible Computer Rule that would lead humanity into the Great Redistribution. Their quest was one for an objective, impartial and incorruptible government that would ensure equality and fairness for all.

As time progressed these two extremist factions got more and more power and support throughout the populace and planetary senates of the 1,000s of planets of the Galactic Republic.

Both factions agitated against the Galactic Republic itself and the moderates that still governed it.

They blocked key votes and deliberately undermined the functioning of the Republican apparatus on all levels. These obstructions caused the Republic to function less well and ironically mobilized even more support for these extremists factions (that were the cause of these problems!).

2.2.2. TECH BEHIND EXISTENCE OF THE SHADOW

Copying a conscience into a Shadow Cloud is actually called Reversed Animation. What the immense machinery of emperor Anubis did was force matter from the Conscience Dimension into a specific pattern in the Material Dimension. The technique is called reversed animation because it forces conscience matter into a host instead of allowing the natural process to unfold where it is the conscience matter that voluntarily chooses a host.

Reversed animation is a very dangerous thing to undertake since the matter of the conscience dimension abhors to be forced like this. There is

a real risk of a rift occurring between the existential plane and our own physical universe when this technique is overused. Which would lead to the destruction of all (semi-) conscious life.

2.2.3. THE SHADOW HIERARCHY

The Shadow created a network of powerful people under his control.

The Shadow even distributed his core conscience nodes over human hosts. The Shadow's core systems are distributed over so called Shadow Cores. These Shadow cores also function as section heads dividing up the human inhabited sectors of space between them. Shadow Cores look like humans, but they have almost no original identity left and are basically completely overruled entities up to the cellular level. The majority of the essence of the Shadow rests in these cores.

Under each Shadow Core, the Shadow created dozens of Shadow Lords. Each Shadow Lord being in charge of furthering the Shadow's cause in a single sector or on a single planet. Shadow Lords usually joined the Shadow out of their own free will, they have some independence of thought, but have a none the less a strong Shadow presence in them. There is enough Shadow essence in these Shadow Lords for them to be able to act as puppeteers themselves and take control of other conscious organisms.

And under each Shadow Lord there are usually operating dozens of Shadow Pawns. However, due to the limited power of the Shadow Lords the presence of the Shadow in these individuals is often small and limited. And above all: crude. For example a Shadow Pawn might just have a tiny shadow presence in him that overrides his conscience on one single point. For example it might force the Shadow Pawn to obey the local Shadow Lord at all times. These lower entities never have sufficient Shadow in them to puppeteer other individuals.

2.2.4. THE SHADOW FRAGMENTATION

The Dissolution War was expected and actively planned and organised by the Shadow, however the extreme severity and speed of the economic negative feedback loop effect was not anticipated by it.

As we already know the Shadow Cloud is organized rather hierarchical. This meant that when all systems and planets got separated from each other

and QTT connection dropped out so did contact between the different clusters of the Shadow Cloud.

This meant that on some planets the Shadow was reduced to several leaderless Shadow Pawns, while on others it had powerful Shadow Cores present.

Reformist factions without strong Shadow presence usually just reverted to a free militaristic and / or totalitarian faction. Falling back on the core motivations and ideology of its fully human members.

The effect of this is that some Planets have been fully claimed by the Shadow, while on others its influence is nil. Quite a few Planets have a Shadow Lord present that is trying to take control. On some planets the Shadow has succeeded and on others it has failed. On most the outcome is still in the balance.

2.3. ON TECHNOLOGY

These topics don't have much impact (or should I say: none at all) on the game. But you might be interested anyway about learning a bit more on the core technologies that were supporting the economy of the Galactic Republic.

2.3.1. THE WARP DRIVE

The warp drive was not just a random invention. The groundwork was based in theory and developed by the Roamer scientist named Raulf Freeman of the Red Moon Clan. A figure of sheer brilliance and revolutionary scientific thinking. At one point he reformulated existing physics theories to the unified theory of "ONE". Meaning that gravity+speed+acceleration+mass+unknown properties all added up to 1. If you increase for example speed you decrease the mass. etc..

That was the easy part.

After that he spent decades to find a way to alter the "one". Eventually something related to quantum entanglement enabled him to get the equation for 2 particles to be equal to "two". Hence opening up the way to increase the speed of one particle to beyond light speed and dumping the negative effects of this higher speed on the second entangled particle.

Just before he died he witnessed the first test flight of a so called 3-engine (later was discovered that the next viable multipliers where 5,7,11,13,17, etc... the prime numbers).

The warp drive is also referred to (by scientists) as the Universal Constant Multiplier Drive. Normal people call it the UCM Drive.

Greatest problem with this UCM technology is that travelling at warp speed would very often result in destruction by collision with a minor space object. A bloody grain of sand would hit a ship like a nuclear bomb when travelling at warp speed.

The only way to travel safely at warp was to have very powerful high-speed AIs on board that were able to detect shadows of minor gravity wells and make course corrections without the need for human intervention.

Another notable technical problem with the UCM technology is that it needs matter to be present in order to work. It needs particles to "dump" negative effects on. If 1 particle gets it constant lifted to 2 it means 2 other particles get their constant decreased to 0.5. And the reverse when slowing down. This created dangerous Hyperfreeze (when accelerating) and Hyperburn (when slowing down) waste products.

3. THE INTERFACE

In this part of the manual all the different screens and windows of the interface will be discussed.

3.1. NEW GAME

When you start a new game you'll have to make a number of choices on a number of screens. We'll walk you through it.

3.1.1. PLANET CLASS

First thing you'll have to do when you start a new game is to choose what kind of Planet Class to play on.

Seth Class

Named after the God of the desert. Desert Planets. Their key characteristic is that they do not have a drop of liquid water on their surface. It is rare, but possible they host an alien biology with non water-based type of life.

Boreas Class

Named after the god of the wind from the north. Icy desert Planets. Their key characteristic is that they have water in usually sizeable amounts, but they have too low temperatures for most of it to be liquid. It is rare but possible they host an alien biology, usually with a non water-based type of life.

Siwa Class

These are Planets that are quite similar to Earth, but the amount of liquid water they have is limited. Hence only a small part of these Planets has open water, life and rainfall. Siwa Class Planets always have either Terran biology or a Terran-compatible alien type of biology.

Limos Class

Named after the god of starvation. Not quite desert Planets, but not much better either. They have some amount of liquid water, but they are always void of life. If they were to have life they would be classed either Siwa Class or Medusa Class.

Medusa Class

Named after the mythological snake-haired creature. Similar to a Siwa Class Planet, so some liquid water and rain is present, as well as some deserts. A key characteristic is that these planets have a hostile alien biology.

Cerberus Class

Named after the mythological three-headed dog guarding the entrance to the underworld. Lava Planets. Their key characteristic is that they are usually hot, without water and quite young. These Planets have a very active geology and often have numerous permanent volcanoes. They can even have Rivers and lakes of magma.

Planetoid Class

A very small Planet that could have been a Moon Class if it would have found itself close to a larger gravitational body. Never had life or sufficient atmosphere. Usually quite boring places, but they can provide for quick and confrontational games.

Moon Class

Even smaller than the Planetoid Class. But even more suited for quick action and short games.

Unclassified

When you play on an unclassified Planet you can expect anything. It could be a Planet similar to one of the classes listed above, but it could be something else altogether.

Comparison to our old Sol Planets

BODY	EARTH VOLUME	RADIUS IN KM	ROUGH CIRCUMFERENCE IN HEX
Earth	100%	6370	200 Hex
Mars	15%	3390	100 Hex
Moon	2%	1737	50 Hex

3.1.2. HISTORY CLASSES

If you want the procedural generation system to work optimally do not flag any of the classes on this page. However if you really want the Planet about to be generated to have a certain outcome flag the history class you want the Planet to belong to. You can select multiple flags if desired.

Note that when you flag Survival Stress, especially on larger Planets, you might end up with a very large amount of Regimes. This might well slow down AI turn processing speeds.

Note that when you flag Alien Lifeforms you are basically forcing xenobiological evolution on the Planet. This can sometimes have interesting and weird, but playable, results. When you combine this flag with a Medusa Class planet (which already ensures Alien Lifeforms) it will often lead to extremely large and dangerous wildlife.

3.1.3. PLANET SETUP OPTIONS

After you have chosen your Planet, you have some options to configure the kind of game you will be playing.

3.1.3.1. GENERATION METHOD

Your choice here will determine how much time you will spend generating your Planet.

Immediate

This option will skip all your Planet generation choices including the chance to determine the initial Profile tendency of your Regime. This is an ideal option if you want to be completely in the dark on the Planet you're about to explore.

Quick

This option will immediately generate a Planet, skipping all the detailed Phases like Geology, Biology, History, etc... This option will however present the player with the final result. And the player can still choose to Re-Roll the entire result.

Detailed

Will allow you to Re-Roll each subsequent generation Phase. It gives detailed and fine control to creating the Planet.

3.1.3.2. FOG OF WAR

Your choice here determines how much information will be available to your empire when the game starts.

Complete FOW

Do not get any information on the Planet map during the generation Phases.

Complete FOW after Colonization

You'll be able to inspect the Planet map during generation until the Colonization Phase has been done. After this you'll be kept in the dark.

Map known, otherwise complete FOW

You'll be able to inspect the Planet map during generation. You know the initial Landscape Types of every Hex on the Map, but otherwise it's complete FOW.

Partial FOW

You'll be able to inspect the Planet map during generation. Once you enter game you'll retain some real-time information on the Hexes of the Planet. Notably the borders of all Regimes. Also comparative statistics will be available, but otherwise the FOW is still applied.

3.1.3.3. DIFFICULTY LEVEL

The harder you set the difficulty level the more challenging your game will be. The higher the difficulty level:

- The more dangerous the competing AI controlled Major Regimes will be
- The more militarized the Free Folk will be
- The more Alien Lifeforms will group themselves into Units
- The slower your Militia will (re)grow
- The quicker Minor Regime forces will (re)grow
- The more start area the Major AI Regimes will have
- The more BP the AI will have available
- The more initial Militia forces the Major AIs will have

Furthermore at Beginner difficulty level you get some small extras:

- The Major AIs are less eager to go to war than on the other levels.
- The Minor AIs start with less Militia and they take less offence when you encroach on their territory.
- You get an extra 2 Fate Points
- Prospecting is easier
- You get an extra Artillery and Armor Battalion Militia Unit at game start
- You always have some discovered Metal and Water resource Hexes near your starting location

On Beginner and Regular you start with 20% income tax. On Hard and Extreme you start at 0%.

On hard difficulty all AI forces get +10% combat bonus and +10% movement bonus. On extreme difficulty all AI forces get +20% combat bonus and +20% movement bonus.

3.1.3.4. TECHNOLOGY LEVEL

Low Tech
Basically a start with almost nothing. Default.

Medium Tech
This should include Ranged Weapons, Sealed Roads and more so it can be properly tested.

High Tech
This should include Atomic Weapons, Walkers, High Speed Rail, Power Plants, etc... so we can try them out.

3.1.3.5. DEVELOPMENT SPEED LEVEL

Normal
Basically a start with almost nothing. Default.

Slower
It will take 2 times longer than Normal Level to Discover and Research / Operationalize and Develop.

Slowest – Epic Games
It will take 5 times longer than Normal Level to Discover and Research / Operationalize and Develop.

3.1.4. PLANETOLOGY PHASE

After you have set the Setup Options and you have chosen Detailed Generation Mode you'll be taken through a number of Phases. In each Phase, a number of Planet stats will be rolled and you'll have the option to Continue to the next Phase or to Re-Roll the current Phase.

The first Phase is the Planetology Phase where you'll determine the key planetary characteristics of your Planet.

3.1.5. GEOLOGY PHASE

The second Phase is the Geology Phase where you'll roll the surface and weather details of the Planet.

3.1.6. BIOSPHERE PHASE

The third Phase is the Biosphere Phase where you'll roll to determine if any Alien Lifeforms have evolved on the Planet, as well as for the composition of its atmosphere.

What is important is that if Alien Lifeforms develop they will impact the composition of the atmosphere. Ideally for human Colonists, the Alien Lifeforms will resemble Terran life and convert carbon dioxide from the atmosphere into breathable oxygen.

3.1.7. COLONIZATION PHASE

The next Phase is the Colonization Phase, where the initial human landing on the Planet and the subsequent years of colonization are simulated.

This is mostly a thematic Phase that could impact stories, but the level of Population on this Planet before the Dissolution War does determine the amount of ruins you'll find on the Planet in the time you'll be playing.

Also the arrival of humans on the Planet might introduce Terran Plants.

3.1.8. DISSOLUTION WAR PHASE

The next Phase is the Dissolution War Phase where the effects this galactic-wide war had on this Planet are simulated.

This is mostly a thematic Phase that could impact stories, but the kind of Planet it is does have an impact on the Population that will survive the Dissolution War to still be present in the time you'll be playing.

In general, Planets without options to easily cultivate their own food and with hostile atmospheres suffered the greatest Population losses during the Dissolution War and its aftermath.

Furthermore the modes of surviving chosen by those who did not succumb to hardship and war have an impact on the kind of cultures you'll find on the Planet in the time you'll be playing.

3.1.9. HISTORY CHOICES

The next Phase only occurs if you did not choose a "Quick Start" game. In this Phase you'll be able to answer a number of multiple choice questions on the history of your people.

This allows you to already orient your initial Regime Profile somewhat.

3.1.10. CUSTOMIZATION OPTIONS

This is the last Phase and it's completely about aesthetics and completely optional.

It allows you to modify your Regime name and your Flag so you feel better at home with some aesthetics you like the best.

3.2. GAME LOOP

After the New Game has been completely set up you'll be dropped in the Game Loop.

The loop is the following:

- AI controlled Regimes do their turns
- Human player is presented with "Start Turn" popup
- Any Vidcom messages are displayed
- You are dropped in the Map Screen after you have reviewed all Vidcom messages (or press Map Tab)
- You make all your moves
- You press End Turn (in the top right)
- The loop starts with above again and continues until you have either won or lost the game.

3.3. THE MAP SCREEN

Do not be overwhelmed! This screen has a lot of functionality.

Let's first take a look what different tabs and bars are present in this screen.



1 The Map
2 The Top Bar
3 The Top Tabs
4 The Left Bar
5 The Right Bar
6 The Bottom Tabs
7 The current Map Order Mode
8 The Next Turn button

3.3.1. HOTKEYS

The following hotkeys work in the Main Play Screen:

HOTKEY	FUNCTION
+ (also mouse wheel)	Zoom In
- (also mouse wheel)	Zoom Out
I	Inspect Mode
M	Move Mode
G	Group Move Mode
S	Strategic Move Mode
A	Ranged (Artillery) Attack Mode
R	Road Construct Mode
T	Traffic Signs Mode
Z	Zone Border Mode
V	Vidcom Screen
H	History Screen
N	Management Screen

F1	Prefs Tab
F2	Stats Tab
F3	OOB Tab
F4	Strategic Map Tab
F5	Stratagems Tab
F6	Decisions Tab
F7	Reports Tab
F8	Mini
C	Construct Asset Order
1	Show/Hide Units
2	Show/Hide Labels
3	Show/Hide AP&Stack Penalties
4	Show/Hide Hex Grid
5	Show/Hide Regime Colouring
6	Show/Hide Operational Logistics
8	Previous Unit
9	Next Unit
0	Enter Guard Mode, Leave Guard Mode
L	Show/Hide Current Logistical Network
P	Show/Hide Preview Logistical Network
Q	Clear all Guard Modes
Escape	Returns you to the Map, or if already there closes any Top Tab that is open or if no Tab open exits the current Order Mode and puts you in Inspect Mode.

3.3.2. MUST KNOW INFORMATION

You can figure out a lot of stuff yourself, but if you are going to skip the detailed interface paragraphs, please do read the following must-know information:

Left click a Unit to select it and right click on a highlighted Hex to move the selected Unit there.

Right click on top of selected Hex or Unit to get access to the Order Mode Popup (or if you do not like this use the Order Mode Tab to the right side of the screen).

3.4. THE MAP

Here you can, among other actions, select your Unit, and move and attack with them.

3.4.1. THE ORDER MODE



In the bottom right of the Map you can see which Order Mode is currently active.

You can change the Order Mode in two ways.

You can right click on the Unit or Hex that is currently selected and a popup will present itself. Here you can click a button to change the Order Mode.

Alternatively you can select the "Order Modes" Tab from the Right Bar. Here you can select which Order Mode to change to.





3.4.1.1. INSPECT MODE [I]

This mode is ideal if you do not want to move anything by accident. While in Inspect Mode you'll never have to worry about making an accidental move while clicking on the Map.

3.4.1.2. MOVE MODE [M]

Left click a Unit to select it. Then all Hexes it can move to will be highlighted or have a red arrow on them (indicating the direction of a possible attack). When you right click on any such indicated Hex the Unit will move there (or just next to it and automatically open the Combat Selection Popup). Movement costs will be displayed in bottom right of the Map.

3.4.1.3. GROUP MOVE MODE [G]

Same as Move Mode except for the fact you'll attempt to move all Units in the selected Hex.

3.4.1.4. STRATEGIC MOVE MODE [S]

Allows you to transfer a Unit over an unlimited distance providing your Logistical Network has the Logistical Points available to pay for the weight of the Unit.

3.4.1.5. RANGED ATTACK MODE [R]

Left click a Unit and then Right click a target to launch the Combat Selection Popup.

3.4.1.6. CONSTRUCT ROAD MODE

When this Order Mode is selected you'll first be presented with a popup demanding you what kind of Road you'd like to construct. After making a choice you can Left click a Hex to be the start point of the Road and then Right click to select the end point of the Road. Make sure you select a source Hex that is part of your Logistical Network. Costs will be displayed in the bottom right of the map.

3.4.1.7. TRAFFIC SIGNS MODE

When this Order Mode is selected you can place Traffic Signs or Pull Points on Roads and avoid your Logistical Network spending energy on a certain part of your Road network. Left click a Hex to select the Hex and then Left Click again to open the Traffic Signs Popup. Here you can put a Traffic Sign for each Road exiting the Hex to stop a certain % of Logistical Points from leaving a Hex through that Road. Also you can Block any Automatic Pull Points or add extra Custom Pull Points to the Hex. There are also Flags that enable you to disable Automatic Pull Points.

Furthermore, for the sake of complete information the Logistical Log of a Hex can also be inspected here. Enabling the Preview Logistics in the right sidebar and using it in tandem with the Traffics Signs Popup is a good way to explore the effects of different settings on your Logistical Network.

3.4.1.8. ZONE BORDERS MODE

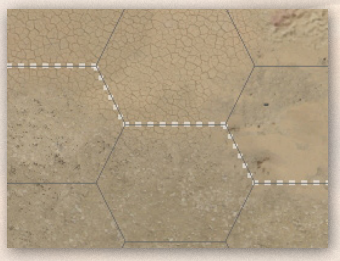
Only usable if you have more than one Zone. Once selected, the Zone you'll be painting on the Map will be the one that the Hex you had initially selected belongs to. If you left click on a Hex of another Zone it will change to the Zone you're painting.

If you right click on a Hex, it changes the "Zone paint" to the Zone which that Hex belongs to.

3.4.2. BORDERS

There are two type of Borders in the game, Zone Borders and Regime Borders.

3.4.2.1. ZONE BORDERS



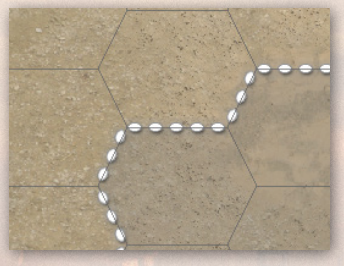
These usually signify an internal Zone Border.

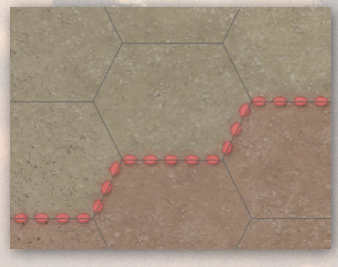
A small dotted line signifies these borders.

However take note that they are also used to denote borders between Minor Regimes with whom you have an Unclear relation.

3.4.2.2. REGIME BORDERS

These are big and bold dotted lines.





Note that they are white when they concern a border with a Minor Regime with whom you have an Unclear relation and that they are coloured with any other Regime (like notably Major Regimes).

3.4.3. LANDSCAPE, RIVERS, CANYONS AND RIDGES

The texture on the Hex signifies the Landscape type.



For example, here we are looking at Clay Plains.

But a Hex can also have a River separating it from neighbour Hexes.

Or Escarpments… which for example pose a negative movement and combat modifier if they are to be scaled.





For now, keep in mind that they almost all have a visual cue and you can always see the name and illustration of the Landscape of the selected Hex in the bottom right corner of the map.

3.4.4. UNITS

Your Units are your military force. They are represented by counters on the map. You can have up to 16 Units on a single Hex. If there is more than 1 Unit present they'll be stacked.



Regular Unit counter



Militia Unit counter



HQ counter

1 The little blocks in the top of the counter signify the Action Points that are left. Each block signifies 10 AP. If the Unit hasn't moved yet the blocks will be green, otherwise they will be white.

2 The letter or number in the top-right of the counter shows an "M" for Militia Units and a number for Regular Units.

3 The bigger coloured block signifies the supply state of the Unit. If it is green the Unit received all supplies that it needed, if it turns yellow, blue or red it has increasingly bad supply. If it is black the Unit received no supply at all.

4 The number signifies the number of Troops the Unit has. 1 point signifies either 100 infantry or 10 tanks/vehicles or guns.

The number is overlaid on a bar which shows the integrity of the Unit. If it is a fully filled bar it means the Unit has all Troops it should have and its Integrity is at 100%.

The color of the bar signifies the Readiness of the Unit, an important statistic for especially offensive combat. If green, Readiness is high, if yellow, blue or red it is lower.

5 The color of the bar in the bottom signifies the HQ the Unit is attached to.

3.4.5. CITIES, ASSETS AND HEX PERKS

Every Zone can have maximum of one City. The City is where the Populace lives and where most Assets will be. However, it is possible to have Assets outside the City. You'll also find Hex Perks on the map which provide a specific bonus to the owner.



1 The City graphic also denotes the size of the City. It has a big font label on top of it to denote the name of the City and the Zone.

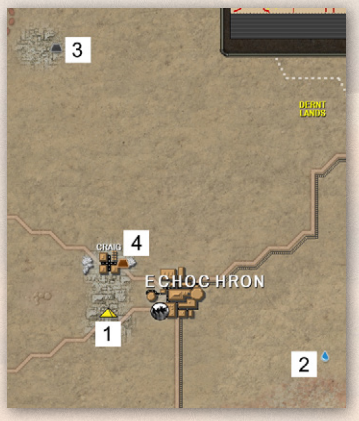
2 A (rural) Asset. The graphic shows which type of Asset is prominent. Also

there is a small font label on top of the Hex denoting the name of the Asset(s).

3 Free Folk settlements. The more buildings in the graphic, the more Free Folk are living in this Hex. Also there is a small font label on top of the Hex denoting the name of the settlement.

4 Hex Perk. The graphic shows the type of Hex Perk. Also there is a small font label on top of the Hex denoting the name of this specific Hex Perk.

3.4.6. RESOURCES AND ARTEFACTS



Hexes can also contain Resources or Artefacts that you can extract.

1 Artefacts are present in this Hex. You can extract them by constructing a Scavenging or Recycling Asset on the same Hex.

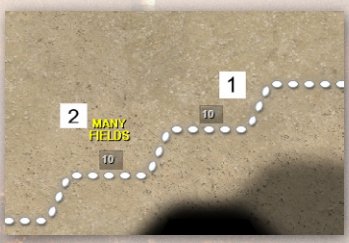
2 Water deposits are present in this Hex. Build an Ice Mine to extract.

3 Metal deposits are present in this Hex. Build a Metal Mine to extract.

4 Rare Metal deposits are present in this Hex. Build a Rare Metal Mine to extract.

3.4.7. OTHER MAP SYMBOLS

You can also find the following graphics on top of Hexes:



1 The number in the transparent gray box indicates the number of AP penalty points to move (or attack) into the Hex.

2 In yellow we see a label indicating the name of the area (which spans multiple Hexes). Areas are purely aesthetic for now. Red labels are used for mountains, blue for seas and lakes and yellow for the remainder.

3.5. THE TOP BAR

Here you are reminded which Regime you are playing and of your current Fate Points, Political Points and Credits, as well as having a wealth of Tabs available to you.



1 The Flag and the name of the Regime currently playing. If in the Main Play Screen, that is your empire, however in history mode or during AI moves it can show another Regime. In the Main Play Screen clicking here focusses the map on your Capital.

2 Some of your key global Resources. From left to right: (a) Fate Points, (b) Political Points and (c) Credits.

3 Screen Tabs. "Map" signifies the Main Play Screen but you can switch to "His" for reviewing moves made by other Regimes in the History Screen. You can re-inspect the Vidcom messages you received at start of turn by switching to the "Vid" for Vidcom Screen. Last but not least, you can click the "Mng" Tab to switch to the Management Screen where some special Windows are available to you to manage and review your Regime.

4 An "Advice" or "Ad." button for toggling on/off the Advice Window. This button is only available if there is some advice to be shown and advice is enabled in the Prefs Tab.

5 The Top Tabs open up all sorts of functionality by descending a tab without leaving the screen. See the next section for more info on them.

6 The date and the End Turn Button. Click on that button when you have made all your moves to give the turn to the other Regimes. Mouse-over the date to see the actual Round number.

3.6. THE TOP TABS

The Top Tabs are aligned to the right side of the screen in the Top Bar. Here you can access a wealth of functionality and information. Once a tab is descended the rest of the interface is still functional.

Click on a tab to open it up. To close it again re-click on it (or anywhere in the top window that is not clickable) or press the "Esc" key.

3.6.1. PREFERENCES

Almost all preferences flagged or unflagged here will be persistent when next time you play a turn or open the game.

3.6.1.1. GENERAL SUB TAB

For adjusting some game flow and interface settings.



Save Game

You can save your game on any location you want, but by default you are advised to save in the saved games directory.

Quit Game

Will bring you back to the Game Main Menu. You might want to save the game before doing this.

Minimize

Same as pressing ALT-TAB and will move you back to the Desktop while keeping the game running.

Auto Save

When active, the game will automatically make a save game every time you press the End Turn Button.

Screenshots

When active, the game will automatically make a screenshot of the map and save it in the screenshots directory.

Auto Mouse Over

Leave flagged to have normal mouse over text behaviour. If unflagged, you'll have to right click to see mouse over text.

Auto Combat
Leave flagged to have normal combat resolution. If unflagged, you'll have to press a button for each Combat Round to start.

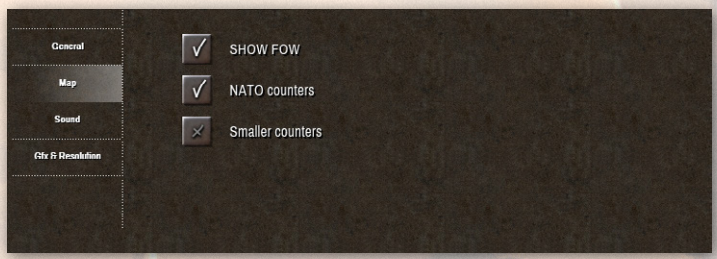
Max Asset Space
When active the game will not show the Regime Info Box in the bottom Asset Tab and Unit Tab, thus freeing up a little more space to display more Assets or Troops.

Show AI Moves
When active, the game will not run the AI moves in the History Screen but in the Game Loop Screen. This is slightly quicker and some might prefer it as well for it giving a more "clean" game experience.

Show Advice
When active, the game will provide you with a small Advice window at most game starts. When disabled, your start of turn will be processed slightly quicker.

3.6.1.2. MAP SUB TAB

For adjusting some map and Unit counter settings.



Show FOW
If flagged, the Fog of War will be shown by a transparent black shadow overlain on the map.

NATO counters
If flagged, the Unit counters will display a big NATO graphic instead of a small version of the dominant Troop Type in the Unit.

Smaller counters

Impacts only maximum zoomed in mode. If flagged, small counters are shown instead of regular zoomed in mode big counters. This allows you to avoid having Unit counters hidden behind others due to Unit stacking.

3.6.1.3. SOUND SUB TAB

For adjusting some music and sound effects settings.



Music

If flagged, the Music will play.

Sound FX

If flagged Sound FX will be played, like movement and combat sounds, but also click sounds and some Leader voices.

Music Volume

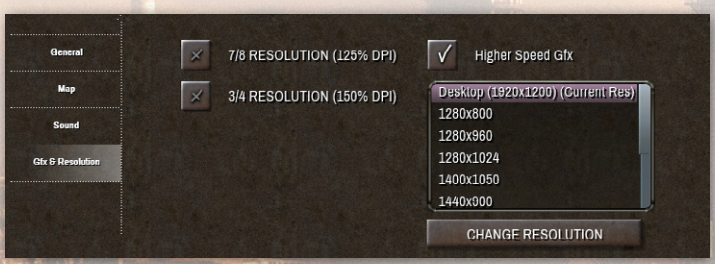
If Music is flagged, this bar will determine its volume.

Sound FX Volume

If Sound FX is flagged, this bar will determine its volume.

3.6.1.4. GFX & RESOLUTION SUB TAB

For adjusting some graphics operations undertaken by the game.



The options to the left (7/8, ¾, etc..) keep your actual screen resolution the same but adjust the DPI of the rendering. The downside of using this option is that, unless you are using the ½ resolution option, the graphics and especially some fonts might turn a bit a fuzzy.

Its important to stress that the ½ resolution button (only available on 4K monitors and better) is the only one that gives a truly clean result.

The list box to the right (and its confirm button below it) allows you to change your actual screen resolution. The downside is that if you "tab" out of the game you'll notice your Windows Desktop resolution will have changed as well. However, when you close the game, the Windows Desktop resolution will turn back to its normal resolution.

You are advised to either use DPI or Screen Resolution change andnd not both (nothing is stopping you though).

Higher Speed Gfx

You are advised to keep this option always flagged. However, in some rare system cases it might prevent problems.

Mouse Lock

Will keep the mouse fixed to the game window. This is a useful option when using multiple monitors.

3.6.2. STATISTICS

This Tab presents you with many opportunities to analyse your Regime, Zones and Military.

3.6.2.1. TROOP STATISTICS

Here you can either select a specific Troop Type / Model to see the evolution of your quantity in service (or amount killed by you, or amount lost due to enemy action).

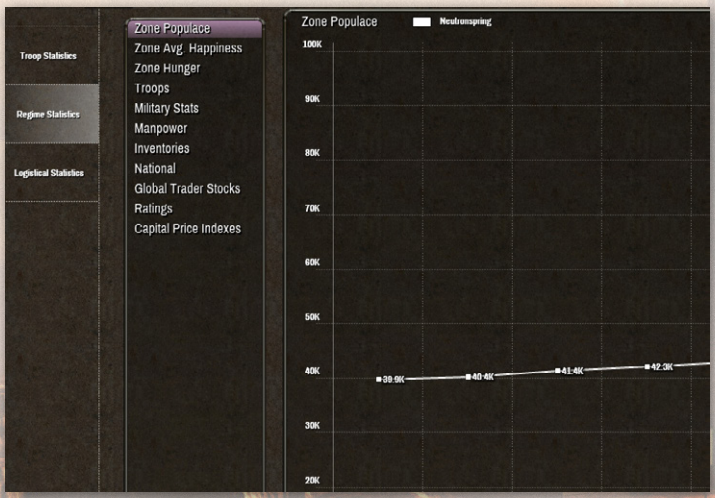
Note that the first list entry adds all Troop Types together in the graphic and the entries with an * sign group together a certain class of Troop Types.

When the game is over, the information on the military forces of the other Regimes should be displayed as well.



3.6.2.2. REGIME STATISTICS

Here you can follow a large number of indicators through the history of your Regime.



Zone Populace
Tracks the Populace of each of your Zones. Populace is the sum of Population and Workers.

Zone Happiness
Tracks the Populace's Happiness of each of your Zones. It uses a weighted average for Population Happiness and Worker Happiness.

Zone Hunger
Tracks the Hunger stat for each of your Zones. It uses a weighted average for Population Hunger and Worker Hunger.

Troops
Tracks the number of Troops active in each Veterancy Class and separately for Militia and Regular forces.

Military Stats
Tracks some further info on your Military. Some averages (Morale, Experience and Hunger) as well as the percentage your Militia forces make up of your total force.

Manpower
Tracks your manpower totals (includes all zones). Note that Free Folk living in your territories are not included in the Total Manpower stat.

Inventories
Tracks the inventories of all your SHQs combined.

National Stats
Tracks a number of key Regime-wide stats like your Popularity, your Word score and others.

Ratings
This tracks how well (or how bad) you are doing compared to the other Regimes on the Planet. Higher rating than 50 means you have a higher score on that rating than the average of all Major Regimes. If lower than 50 the inverse is the case.

Capital Price Index
Tracks the price evolution of the different Resources with the Traders at the Capital of your Regime. Note that these are indexes and not real prices.

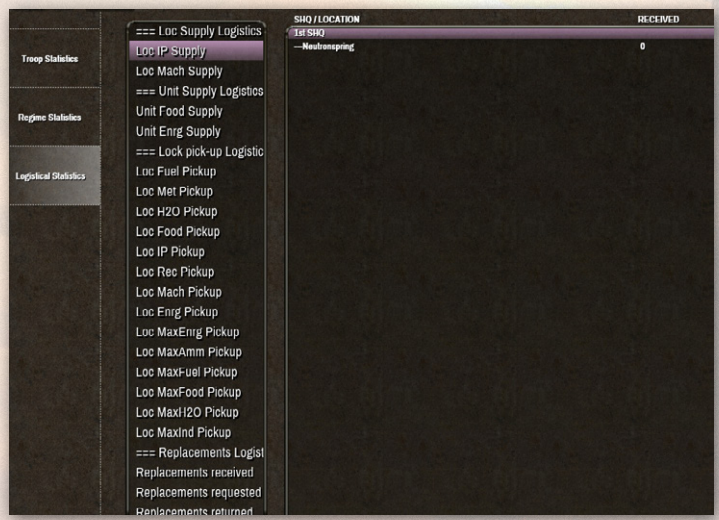
Casualties
Tracks the amount of casualties you have suffered.

Comparative Stats
There are several stats in this category. It shows how all the Major Regimes are doing. However, the other Major Regimes will only be visible when you are playing in "Partial" FOW mode or when you have either won or lost the game.

3.6.2.3. LOGISTICAL STATISTICS

Information for the quartermasters under us. Here you can inspect in detail what has been going on concerning your logistics "front".

This information is always based on the algorithms run at the start of your turn.



Loc Supply Logistics
Tracks per Resource what each Zone requested at its SHQ (Strategic HQ) and what it received from that SHQ.

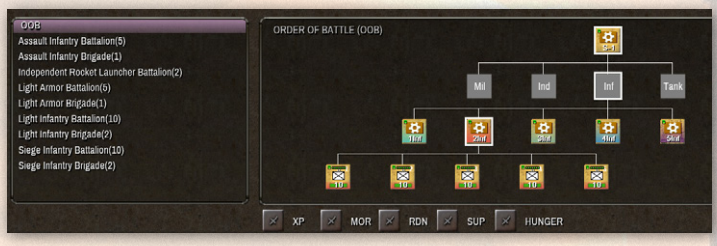
Unit Supply Logistics
Tracks per Resource what each Unit requested at its SHQ and what it received from that SHQ.

Loc Picked-up Logistics
Tracks per Resource what each Zone offered to its SHQ and how much that SHQ actually picked up.

Replacement Logistics
Tracks per Unit what Replacement Troops it has been requesting and has received. Also tracks any returns of Troops from Unit back to its SHQ.

3.6.3. ORDER OF BATTLE

This Tab allows you to inspect your military Units and their hierarchy.

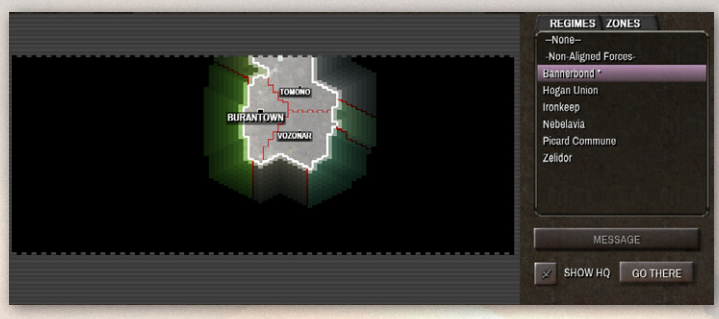


The first entry in the list "OOB" displays an organogram of the chain of command and types of your Units. Each SHQ can have its own "tree". Militia are organized per Zone (of their origin) and individual single-Unit Formations are also organized per Zone (but based on where they are currently located). The Regular multi-unit Formations are grouped in their "type" of Formation like "Infantry Formations" or "Tank Formations".

The entries below the "OOB" entry in the list give you detailed information under each type of Regular Formation noteably on their current strength levels (CUR) versus their ideal strength levels (TOE) and the Troops they would like to receive as Replacement Troops (MISS).

3.6.4. STRATEGIC MAP

This Tab allows you to inspect the whole Planet. You can either inspect Zones or Regimes.



This Strategic map does something special when confronted with the Shroud of Darkness (undiscovered Hexes). It makes an educated guess of which yet unseen Hexes will probably belong to a Zone or Regime. This is much easier to interpret then a thin band of single Hexes you actually have recon on.

If a Hex has been discovered but in a subsequent turn it disappears in the Fog of War, the last known owner will be indicated.

Several buttons are also available:

Message
This button can be used to send a message to a Human Player.

Show HQ
Can be flagged to make your own SHQs and OHQs show up on the map.

Dip. colours
Can be flagged to colour all the Regimes in a shade that reflects your Relation level with them. Red for Regimes you are at war with, Yellow for Minor Regimes your relation is unclear with and Green for Regimes you are at peace with.

Go There
When you click here the map below the Tab will centre on the selected Zone or Regime.

If you have a good screen resolution and the Bottom Tab is not hidden you can also use this button to quickly inspect plenty of Regimes or Zones.

Mouse Wheel
If you Mouse Wheel with the mouse hovering over the Strategic map you'll be able to scroll the actual Planet. This can be useful if your initial starting location is too close to the edge, for example.

Tab: Regimes
In the first Tab you can select a specific Regime.

Tab: Zones
In the second Tab you can select a specific Zone.

Tab: Stats
In the third Tab you can select a specific Stat, like inspecting rainfall or temperatures.

3.6.5. STRATAGEMS

This Tab shows you all the Stratagems in your possession and allows you to play them.



1 Note that there are two sub tabs, one for selecting the Stratagem you want to play and one for selecting the target to play the Stratagem on. Depending on the Stratagem, a target can be a Regime, a Zone, a Leader or a Unit.

2 You can have many Stratagems and to keep things organized the Stratagems are sorted per category. Stratagems in the same category have the same target type.

3 Each Stratagem has it cost displayed with a little green fist symbol (for PP cost) or with a little yellow sun symbol (for FP cost). Some Stratagems exist that are free of costs. Some Stratagems also require extra costs like for example a certain amount of Credits.

4 Except for the "Nation" category of Stratagems most need a target to be set. Here in the right pane the selected target is shown. You can change the target (1) by going to the target sub tab.

5 The Leader who'll execute the Stratagem is also shown. Any Skill rolls will be made by this Leader.

6 Either the Execute Stratagem button is greyed-out and the reason why is given above, or all is okay and you can go ahead and play the Stratagem (on the selected target).

It is also possible to scrap Stratagems to gain Scrap Points, which allow you to craft Scrap Stratagems. To go to "Scrap Mode" click the so-named button in the top right. Once in Scrap Mode you can click on the trashcan symbol overlain on all Stratagems. By doing so you will scrap the Stratagem and recuperate the Scrap Points indicated. In Scrap Mode the Craft Stratagem button is also visible on the right side of the tab. Click the Craft Stratagem button to generate a new Craft Stratagem (and doing so will also get you out of Scrap Mode and back in regular mode).

3.6.6. DECISIONS

This Tab groups all the Decisions you are asked to make for your current turn. Note that you are never obliged to make them and nothing is stopping you from ending your turn without making some or all of them (if you don't, the sender of the Decision will make the Decision, or if possible the Decision will be postponed to the next turn).



1 If there are multiple Decisions, they'll be sorted in Sub Tabs.

2 Once a Sub Tab is clicked you can select the specific Decision you want to inspect.

3 You'll have to click on of the choice buttons to choose your specific Decision. Note that the probable consequences (like Regime Profile change) are displayed next to the choice text as well as any costs (like PP or Credits).

4 Furthermore, for each Decision you can see the impact (if any) on your Leaders if chosen. A green value represents a Relation improvement and a red value represents a Relation deterioration.

5 A stamp in the top shows if this Decision is "real time" or "archived". If it is "real time" it means that you can still make other actions and re-inspect the Decision that could be changed upon those actions. If it is "archived" it means that the Decision will not take any changes to the game state into account that you might make during your turn.

6 The sender of the message. This is quite often your Secretary, but it can also be Council Directors or Governors. Remember you can click the portrait to get detailed stats on the Leader in question.

There are many different kinds of Decisions. Some of them present you with multiple choice buttons like in the example above, but others might have a slightly different interface, like for example budget Decisions that will give you sliders to play with.



3.6.7. REPORTS

This Tab groups all the Reports you have received for you current turn.

1 If there are multiple Reports, they'll be sorted in Sub Tabs.

2 Once a Sub Tab is clicked, you can select the specific Report you want to inspect.

3 In the "Empire Dashboard" Report you are presented with an overview of your core stats as well as list of the Organizations that are active and their budget allocations.

4 The "Empire Dashboard" Report also reminds you of the game version you are using.

5 A stamp in the top shows if this Decision is "real time" or "archived". If it is "real time" it means that you can still make other actions and re-inspect the Decision that could be changed upon those actions. If it is "archived" it means that the Decision will not take any changes to the game state in to account that you might make during your turn.

6 The sender of the message. This is often your Secretary, but it can also be Council Directors or Governors. Remember you can click the portrait to get detailed stats on the Leader in question.

3.6.8. MINI MAP

The smallest of all the Top Tabs. It is so small because it allows you to continue to Move your Units with this Tab open for orientation.

If you click on the Mini map, the map will centre on that spot.

Mouse Wheel

If you Mouse Wheel with the mouse hovering over the Strategic map you'll be able to scroll the actual Planet. This can be useful if your initial starting location is too close to the edge, for example.

3.7. THE LEFT BAR



The Left Bar gives you access to some very important information.

1 The SHQ Inventory bar.

2 The Unit Bar (only present if you have a very low screen resolution).

3 The Regime Profile bar.

4 The Quick Zone and SHQ Bar.

3.7.1. SHQ INVENTORY BAR



This bar shows the inventory of the SHQ that is assigned to the Zone of the selected Hex on the map.

It shows all the Items present in the stocks of the SHQ. Furthermore, it shows the change in the stocks compared to the last end of turn and the start of your current turn.

If you mouse-over an Item, you'll be notified of the in- and outflows to and from the SHQ in question.

If you want to see what specific Units received from the SHQ to go the Stats Tab in the Top Bar.

If you want to see what specific Zones sent to and received from the SHQ, go to the Items Tab in the Bottom Bar.

Note that SHQs may lose Items (if they cannot sell them to Traders) due to Maximum Item Storage rules. If Maximum Item Storage has been reached this will be indicated with an * asterix sign directly after the Item quantity.

You can also click on the SHQ name to directly select the SHQ Unit.

3.7.2. REGIME PROFILE BAR



This bar shows the current Profile scores of your Regime.

First the 3 Profile Groups are displayed. After auxilliary Profiles are displayed.

The highest Profile in a group is presented bigger and to the left of a group. Colors are used to indicate if a Profile is surpressing another Profile (green) or is being surpressed itself (red) or the Profile is surpressing and being surpressed at the same time (yellow).

You can mouse over a Profile to get detailed information what Regime Feats it can unlock at what scores.

3.7.3. UNIT BAR

This bar is only accessible if you have a very low screen resolution. In that case you'll be able to see all Unit present in the selected Hex in this Tab. With normal or better screen resolution, the Units will be present in the Unit Tab in the Bottom Bar.

3.7.4. QUICK ZONE AND SHQ BAR

Allows you to quickly switch from one Zone to another. You can also click on SHQ names.

3.8. THE RIGHT BAR



The Right Bar gives you access to Orders Layers and Order Modes.

1 The Order Bar

2 The Map Layers Bar

3 The Map Order Modes Bar

3.8.1. THE ORDER BAR

This bar shows you all the Orders you can execute on either an SHQ, a selected Unit or a selected Zone.



1 You can make your selected SHQ sell or buy Items (Trade), or transform Items (Workshop) or transfer Items to another SHQ. You can also buy Replacement Troops to be placed in your SHQ.

2 You can order your selected Zone to raise a new Formation, change its SHQ or receive Colonists. You can also order the selected Hex in the selected Zone to become the City for a new-to-be formed Zone or to construct an Asset on it.

3 You can micro-manage the selected Unit or directly buy Replacement Troops for it. It is also possible to transfer Troops from the selected Unit to another Unit in the same Hex (or to a new to be formed Battle Group (BG)).

3.8.1.1. WORKSHOP

Selected SHQ will be used.

Here you can produce Ammunitions and Machines. Drag the relevant slider for either Ammo or Machines and press the "Produce" button to validate.

No slider is available if you do not have the Items to produce at least a quantity of 1.

The relevant Item inventory of the SHQ is shown as well as the costs involved in producing.

3.8.1.2. REPLACEMENT TROOPS

This Order can be executed on an SHQ or on a non-SHQ Unit.

Producing in an SHQ never requires any Logistical Points since everything is taking place in the same Hex. Neither do Quality Levels limit your choice. Also, you will not need to pay for the Supply Stocks (like Fuel, Ammo and Food).

For normal Units and OHQs, the condition is that there are enough Logistical Points to transport the Replacement Troops from your SHQ (where they are produced) to your Unit in the field. Furthermore, you can only produce Models that conform to any Quality Level settings for the Unit in question. You'll also need to pay for the Troops' Supply Stocks.

Executing on a SHQ

Here you can produce Troops that will arrive in your selected SHQ. They will most likely function there as Replacement Troops to replace losses of Units in the order of battle of the SHQ.



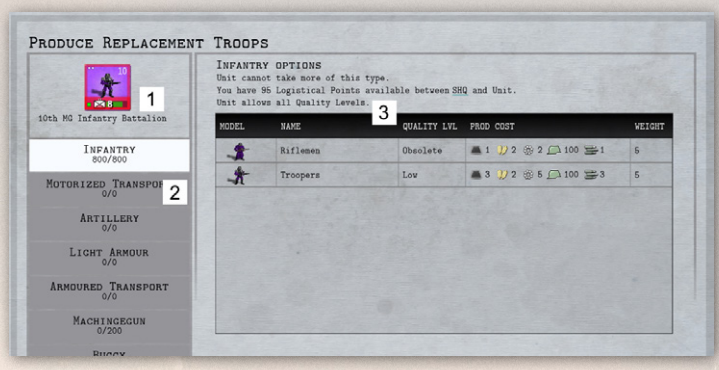
1 The SHQ that is being used.

2 The different Reinforcement Types that are present in the SHQ compared to what the Units in the order of battle of the SHQ are missing. So for example 400/100 Infantry means that the SHQ has 400 Infantry while the Units in its order of battle are missing 100 Infantry.

3 A list of Models that belong to the selected Reinforcement Type. Click on one in order to select how many of it to produce. Any production will be placed in the SHQ.

Executing on a non-SHQ

Here you can produce Troops that will arrive directly in the selected Unit.



1 The Unit that you want to create Troops for.

2 The different Reinforcement Types that are present in the Unit compared to what it ideally should have present. So for example 0/200 Machineguns means that the Unit is missing 200 Machineguns.

3 A list of Models that belong to the selected Reinforcement Type. Click on one in order to select how many of it to produce. Any production will be placed directly in the Unit.

3.8.1.3. TRADE

Selected SHQ will be used.



1 You can select either to buy from the Traders (costs Credits) or to sell to the Traders (gives Credits).

2 You need to move a slider to indicate the quantity you want to buy or sell and then press the associated buy or sell button to the right side of the slider.

Purchases are limited to the amount of Credits you have available as well as the amount of Items the Traders have and are willing to sell.

Sales are limited to the amount of Credits the Traders have as well as the amount they are willing to buy this round.

If an Item's price point is too low, you will not be able to sell an Item to the Traders.

3.8.1.4. ZONE SHQ

Selected Zone will be used.

If you have multiple SHQs you can give this Order to subordinate a specific Zone to a specific SHQ.

3.8.1.5. RAISE FORMATION

Selected SHQ will be used and the selected Hex will be used.

This Order has 4 different Tabs.

New Formation allows you to create a new single Unit or multi-Unit Formation.

New SHQ allows you to create an extra SHQ.

Missing Unit allows you to recreate a lost Unit of a multi-Unit Formation.

Missing HQ allows you to recreate a lost OHQ of a multi-Unit Formation.

Except for the New SHQ, all Unit creation will require you to have the necessary Logistical Points to transport the produced Troops to the selected Hex.

New Formation

New Formation allows you to create a new single Unit or multi-Unit Formation.

This Tab will show you a list of Formations (5) you can produce. The items shown in the list depend on your settings above the list (1-4).



1 Size allows you to select which size of Formations should be shown in the list.

2 Multi-Unit allows you to select if only single-Unit Formations, which are also called Independent Formations should be shown or if only multi-Unit Formations, with an OHQ should be shown in the list.

3 Quality Level allows you to select which Models are allowed to be produced and will limit the list to Formations to those that have Models available with the selected Quality Level (if not available the Formation will still be show but labelled "No Models available").

4 If you toggle the Use SHQ Troops flag the calculation if you enough Items to produce a Formation will allow for using Troops already present in the SHQ. By reducing the need to produce Troops you reduce the cost and you might be able to produce some Formations you'll otherwise not be able to.

5 You can select an item in the list if you can produce 50% or more of its Troops. You can mouse over that percentage to see if it is low because of lack of Logistics to the selected Hex or lack of Items at the SHQ.

After you have clicked on a Formation in the list you'll be brought to a second window.



Here you can make a final inspection and some final choices before actually raising the Formation.

1 The percentage of Items (Metal, IP, etc..) needed you have available at the SHQ. Ideally this is 100%. A lower percentage means the Formation will not be fully produced, but will be lacking some Troops. Note that the Item cost is shown in detail with for each Item the cost for raising the Formation versus the reserves in the SHQ. So for example 20/1264 Metal signifies raising the Formation costs 20 Metal while you have 1264 Metal available at SHQ.

2 The percentage of Logistical Points needed between the SHQ and the selected Hex. Ideally this is 100%. A lower percentage means the Formation will not be fully produced, but will be lacking some Troops.

3 The percentage of the Formation that will be raised. Will be equal to the lowest percentage of Logistical Points percentage and Items percentage. It has to be 50 or more in order for the raising of the Formation to be allowed.

4 If you have multiple Models that belong to the same Reinforcement Type than you can (de)select which ones will be included in the new to be raised Formation.

5 Press the "Raise Formation" button when you are sure and it will be done!

Note that there is also a Use SHQ Troops flag. If toggled you'll be able to include Troops already present in the SHQ Unit to be included in the new Formation.



1 Flag or unflag the Use SHQ Troops flag to use them or not.

2 If using SHQ Troops you can select which Models you allow to be used and which not.

3 Furthermore, you can set the percentage of Formation Troops that will be produced and the percentage that will come from Troops already in the SHQ.

4 And last but not least you can ex- or include certain Veterancy Classes of the SHQ Troops. This allows you for example to raise an elite new Formation from disbanded remnants (and thus ending up in SHQ) of older Formations.

New SHQ

Will create a new SHQ on the selected Hex at a hefty price in PP.

The selected Hex must be a City Hex.

Missing Unit

Will allow you to just raise a missing single part of a multi-Unit Formation. The Units you can "Reform" are displayed and you can select which one to reform.

The interface uses a quick mode in this Tab and pressing the "Reform" button will immediately produce the missing Unit. You'll not be able to make any specifications at this moment. However, if SHQ Troops are available they will be used.

Missing HQ

Will allow you to just raise a missing OHQ of a multi-Unit Formation. The HQs you can "Reform" are displayed and you can select which one to "Reform."

The interface uses a quick mode in this Tab and pressing the "Reform" button will immediately produce the missing Hq. You'll not be able to make any specifications at this moment. However, if SHQ Troops are available they will be used.

3.8.1.6. SEND COLONISTS

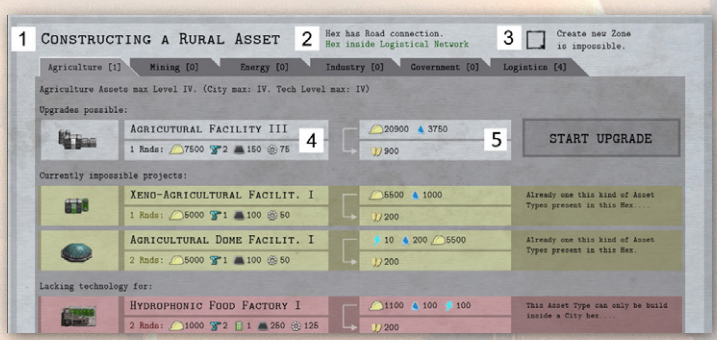
This Order can be used for two purposes. Firstly, to send Colonists from an SHQ to a Zone that is attached to that SHQ and secondly, to disband Recruits in SHQ and return them to the Zone as Population.

3.8.1.7. CONSTRUCT [C]

Selected Hex will be used.

This Order can in theory be made on any Hex in any Zone. Note that some Assets can only be constructed in Cities and some only in "Rural" Hexes. A Rural Hex is another way of saying a non-City Hex.

The Construction Popup provides you with a list of Assets that you could construct. They are sorted over a number of Tabs, like Farming, Mining, etc..



1 In the top left you can see if you are attempting to construct on a Rural or a City Hex.

2 In order for construction to work the Hex must ideally have access to at least 100 Logistical Points. The game will automatically construct a Dirt Road for you to connect up with your Logistical Network if necessary, at an extra cost. It is also possible this is not an option and in that case

you must first improve logistics leading towards your selected Hex before commencing constructing.

3 If the Hex is far away from existing Cities, you can flag the create New Zone flag. This will automatically create a new Zone upon completion of construction of the Asset. Don't feel obliged to use it as you can always order a new Zone to be formed on the Hex in question later on.

For each Asset the colour indicates if you can proceed with constructing it. White means you can proceed. Yellow means there is some condition that is not being met. Red means you have to do research first before being allowed to construct the Asset in question.

4 For each Asset the construction cost is listed. Note that the Item quantities shown must be paid for every Round of construction.

5 For each Asset the production power (upon construction completed) is also shown. In the top row the production cost + Upkeep cost is shown. In the bottom row the resulting production is shown.

Once you know which Asset you want to construct you press the "Start Construct" button for that specific Asset.

3.8.1.8. NEW ZONE

Selected Hex will be used.

The Hex must have at least one Asset in order to found a new Zone.

The Hex must also have a minimum distance from other City Zones.

Once you go ahead in picking the new Zone's SHQ the Zone will be created, and the selected Hex will become the City Hex of the Zone.

3.8.1.9. UNIT ADMINISTRATION

Selected Unit will be used.

This Order has 5 different Tabs.

Settings allows you to fine-tune the behaviour of the Formation, as well as inspect some detailed statistics of the Unit. Depending on if you are inspecting a SHQ or a non-SHQ Unit different options will be available. Militia Units will hardly have any settings you can set.

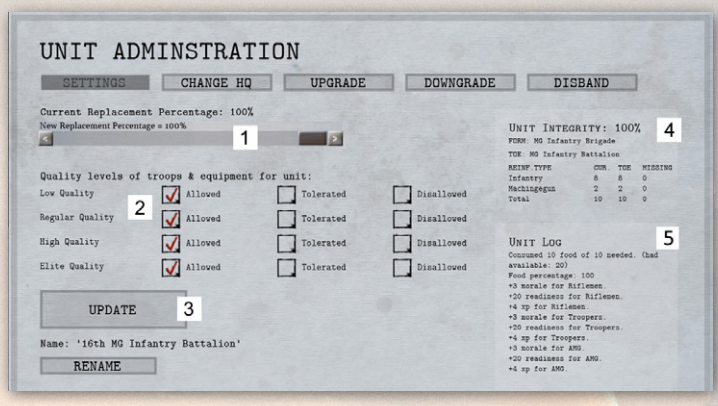
Change HQ allows you to change the HQ of a Formation.

Upgrade and Downgrade allow you to change the Formation Type.

Disband allows you to order a Unit or Formation to return all Troops to SHQ.

Settings for a Non-SHQ

This will be nearly the same for a non-HQ Unit and an OHQ. Except for the fact you can change the colour of the OHQ if you want to.



1 Normally the Replacement Percentage of a Formation is at 100%. If you set it lower, it means that losses will not be replaced by Replacement Troops until the troop percentage left is lower than the Replacement Percentage. Don't forget to click Update after changing.

2 By default all Quality Levels (except Obsolete of course) are allowed to be in the Unit and be sent to it as Replacement Troops. Here you can exclude certain Quality Levels. Allowed means the Unit wants to keep and receive that Quality Level. Tolerated means the Unit wants to keep, but not receive the Quality Level and Disallowed means the Unit neither wants to keep, nor receive the Quality Level. Don't forget to click Update after changing.

3 Click Update after making changes (except for Rename which is immediate).

4 Shows you what kind of Formation the Unit is and what its ideal TOE (table of organization and equipment) is. CUR means current Troops in the Unit while TOE shows the ideal Troops present in the Unit

5 A quick log showing all the changes to the Units Troops variables during start of turn calculations.

Settings for a SHQ

As you might already know the SHQ is the spider in your logistical web. It sends Items to all Zones and Units that need them and receives excess Zone Items and unneeded Unit Troops back. In theory, your Logistical network will have enough points to provide for all those tasks. However, in practice you might find that there are not enough Logistical Points available to accomplish all tasks.

That is why you can reserve Logistical Points for specific SHQ usages. For example, you could set Sent to Zones, pickup from Zones, Unit Supply each to 30% so there is always 10% left for sending Replacement Troops.

Change HQ

A simple window where you can pick the new HQ.

Independent Non-HQ Units can be attached under OHQ (if enough auxiliary slots left) or under SHQ.

Units from a Multi-Unit Formation cannot change their HQ.

OHQs can only be attached to SHQs.

Militia Units can only be attached to SHQs.

Upgrade and Downgrade Formation Type

This is basically a way to change the Formation Type. It might result in some Troops getting sent back to the SHQ because they will no longer be needed (since the TOE changed) and it might as well result in requesting extra Replacement Troops to provide for the now missing Troops compared to its new TOE.

Upgrades and Downgrades are applied for the whole Formation if it concerns a multi-Unit Formation.

Disband

Setting a Unit to Disband is not permanent and you can return the same turn to unset it from Disband Mode. If an OHQ is selected all Units in its Formation will be set to Disband. If a non-HQ is selected only that Unit will disband.

The Disband effect goes into effect start of next turn. If enough Logistical Points are available an empty husk of a Unit will remain and be removed the turn after.

3.8.1.10. TRANSFER / BATTLEGROUP

An order for advanced players. It allows you to form Battlegroups from Regular Units as well as transferring Troops from one Regular Unit to another in the same Hex.

Keep in mind that Battlegroups might provide flexibility, but also come at some costs. Notably non-GR troops in Battlegroups suffer a -15% on their attack value.

Keep in mind that Battlegroups might provide flexibility, but also come at some costs.

3.8.2. THE MAP LAYER BAR

This bar allows you to enable or disable graphical overlays on the map.



Current Points [L]

When this layer is active, your remaining Logistical Points are shown on the map. The Logistical Points can be used for Strategic Movement, SHQ Transfers, Replacement Troop purchases in another Hex than the SHQ Hex and raising new Formations in another Hex than the SHQ Hex.

Used Points

When this layer is active, all the Logistical Points that have already been expended during your turn are shown.

Initial Points

When this layer is active, the Logistical Points you received at the start of turn and before any of them were used are shown.

Bottlenecks

When this layer is active, the game will show you the percentage of Initial Points that are still left. The lower the percentage that is left the more the colour will turn alarming. Remember that only if the colour turns black have you exhausted all initial Logistical Points on a certain trajectory.

Preview Pts [P]
When this layer is active, the game will show you the probable initial Logistical Points you'll receive at the start of your next turn. Furthermore, when selected, a Zone-sensitive list box will appear that allows you to select a specific logistical Asset and inspect just the Logistical Points that the selected specific Asset will generate, overlaid in a brighter colour over the total preview of Logistical Points.

Hide Units [1]
Hides all the Units so you have a clear view on the map.

Hide Labels [2]
Hides all the City and Rural Asset and Hex Perk names.

Hide Penalty [3]
There can be movement penalties (and combat penalties) on certain Hexes. They can distract the player and so can be switched off.

Show Grid [4]
Grid lines can help you better interpret the map.

Show Colour [5]
Colours the Hexes belonging to other Regimes to improve clarity of the situation.

Show Log [6]
Shows the Operational Logistics Ranges. Green is excellent, yellow is sub-part, blue is bad, red is really bad.

3.8.3. THE ORDER MODES BAR

This bar contains the same buttons to switch Order Modes as right clicking on the selected Hex on the map. See the section on the map for quick explanations of the different Order Modes.

3.9. THE BOTTOM TABS

Here you can inspect your Zones, Other Regimes and your Units. Three of the five Tabs are reserved for the Zones: the Zone Tab itself, the Asset Tab and the Items Tab.



In some of the Tabs you'll be able to give Orders. Notably, you can Call your Governor (Zone Tab) or Commander (Unit Tab). Furthermore, you can change the Mode of your Assets in the Asset Tab.

There is a wealth of information in the Bottom Tabs. Do not panic!

1 Button to minimize (or maximize) the Bottom Tabs and have more map space available.

2 The different Bottom Tabs. From left to right: Zone Tab, Unit Tab, Regime Tab, Asset Tab and Items Tab.

3 The current Order Mode you are using. Use the Order Mode Tab in the Right Bar to chance or right click on an already selected Hex.

4 Some quick info on the selected Hex. Mouse-over it to get detailed info on the modifiers of the Hex in combat and movement.

5 A picture of the Landscape of the Hex as well as a small banner of the Regime controlling the Hex.

In all Tabs and if your resolution has enough screen width, you'll be able to see the Hex Info Section. It is possible to disable it by flagging Max Asset Space in the Prefs Tab.



1 Shows the temperature of the Hex in degrees Celsius.

2 Shows the rainfall on the Hex in mm/year during this Round.

3 Shows the number of Scavenge Points present in the Hex. These can be collected by constructing a Recycling Facility.

4 The number of Hex Recon Points you have on the Hex. The more you have the more precise you'll be able to determine the strength of enemy forces. Use mouse over for detailed info.

5 The number of Stack Points in the Hex. The stacking limit in *Shadow Empire* is quite high at 100 points or the equivalent of 10,000 Infantry Troops.

6 The AP Penalty on the Hex is shown here. This penalty will be the sum of ZOC penalty and AP Penalty for taking Enemy Hex and/or the Battle Delay Penalty caused by a previous battle.

7 RAD is short for Radiation Points. Mouse over these points to see the impact level they'll have on your presence in the Hex.

3.9.1. THE ZONE TAB

This Tab gives you all the core information on the Zone that the selected Hex belongs too.



1 If the City sub tab is selected (the top-left one of the nine sub tab buttons) the Governor of the Zone is shown together with the option to Call him/her. There is also the option to directly go to the Stratagem Tab with the current Zone selected as target.

2 There are nine sub tabs available to get detailed information on from top to bottom, left to right: City Level, Population, Workers, Zone administration Mode, Population Happiness, Worker Happiness, Civilisation Score, Cultural Adaptation Score (CAS) and Logistics. All sub tab buttons including their details have mouse over texts available for further explanations.

3 Some extra sub tab buttons might be available here if something is to be shown. For example, the one shown here when clicked gives extra information of Militancy and Militia forces of the Zone.

3.9.2. THE UNIT TAB

This Tab gives you all the core information on the selected Unit.



1 There are several sub tab buttons you can select. Note that the bigger one with the big Unit counter on top of it gives you the info (2) on the first Commander in its chain of command and the Posture of the Formation (if any).

When other sub tab buttons are pressed you'll be able to see different information than the Commander and the Posture. From left to right, top to bottom the sub tab buttons give information on: Type and Quality Levels of Unit, Action Points (AP), Readiness, Morale, Experience, HQ Power and organizational stats and the last sub tab button gives info on Supply stocks and the Unit's requests and deliveries received.

2 If the big sub tab button with the Unit counter is pressed the Commander info will be displayed. This includes the option to Call the Commander and the option to open the Stratagem Tab with the current Unit selected as target.

If applicable there is also the option to go to the Hex of the (S)HQ of the selected Unit and select that (S)HQ. This way you can quickly move up in the chain of command if necessary.

3 The Posture of the Formation is shown. Keep in mind only multi-unit Formations with their own OHQ Commander can be assigned a Posture. A Posture is assigned by playing a Posture Stratagem on the Formation. You can mouse over the Posture name and image to get details on its effects and modifiers.

4 The Troops and Unit Feats of the Unit are shown here. If you want detailed information on some Troops, click them and a popup will appear giving you detailed stats on those selected Troops.

3.9.3. THE REGIME TAB

This Tab gives you all the core information on the selected Regime. The selected Regime is the owner of the selected Hex.



1 The banner of the selected Regime.

2 The name of the selected Regime.

3 The portrait, title and name of the Leader of the selected Regime.

Below that on a black background your current Relation level with the Regime in question.

To the right of the Relation level with a coloured background the current status of your Relation is given:

- Red background for a state of war or for an Unclear Relation with a Minor Regime
- Green for Allies or Friends status with a Major Regime or peace with a Minor Regime
- Blue for Cold or Blackmail status (but at peace) with a Major Regime

To the right of the status, a button to play a Stratagem on the Regime will be available.

Below that you'll be able to see if it concerns a Minor or a Major Regime and what kind of Culture the Regime is.

4 A number of detailed statistics. From left to right: The Recon on the Regime, Communication level with the Regime, Trade deal level with the Regime, Research deal level with the Regime, Military pact level with the Regime, your Import Tariff setting on goods imported from this Regime and your Export Tariff setting on goods exported to this Regime.

5 From top to bottom: An overview of the Profile of the Regime, the Tech Level of the Regime, Culture Type and a classification for the leading Faction within the Regime.

6 The name of the Political Body of the Regime.

7 The different Factions active within the Regime. For each their last election result in vote percentage is shown, as well as any Faction Support Points if they have any.

3.9.4. THE ASSET TAB

This Tab gives you all the core information on the Assets in the selected Zone.

You can select an Asset displayed here on the right side to get more detailed info and operations



1 The detailed info and options for the selected Asset. It repeats the Zone where the Asset is present (in case it is a delegated asset this might display other info) and gives you the core info: Last production % (100% is ideal), last Upkeep %, any Damage Points and the current Limit Production setting.

2 You can order your Assets in to 3 different modes. The normal and default Production mode, the Mothball mode in which the Asset is kept from degrading (accumulating Damage Points), but will not produce anything and Closed mode, in which the Asset will be fully abandoned and will eventually disappear due to lack of maintenance.

3 If the Asset is in Production mode, you can further fine tune it by limiting its production to a certain percentage. 100% means there is no limit in place.

4 Each Asset in the Zone (or Hex) is shown here. If you click once you select it. If you click again you'll open a popup with more detailed information on the Asset Type as well as the specific Asset Log for the selected Asset.

5 Above the Asset illustration the Items that were consumed by the Asset are shown. If the number is coloured white all is okay. If the number is yellow part of the needed Items were not available. If the number is red none of the Items needed were available. You can mouse over each Item for more info.

6 Below the Asset illustration the Items that were produced by the Asset are shown. If the number is coloured white all is okay. If the number is yellow only part of the Items that could have been produced were produced. If the number is red, no Items were produced. You can mouse over each Item for more info.

7 The little light in the top-right corner of each Asset is a quick reminder of the mode the Asset is in. Green for Production mode. Yellow for Mothball mode. Red for Closed mode.

8 The bars to the right give you a quick visual indication of Production % and Upkeep %. You can mouse over them for more information. If the Asset is damaged a red coloured bar will appear to the left indication the amount of Damage Points.

9 Here you find pagination buttons (if you have more Assets than can be displayed in one row) as well as buttons to select which Assets are shown. From top to bottom: only the Assets in the selected Hex, all the Assets in the Hex, Only Public Assets, only Private Assets and the last button: only Delegated Assets.

You might have noticed some Assets are shown in a different colour scheme than others.



1 Grey coloured Asset blocks signify Public Assets. These will use Items from your Zone.

2 Brown coloured Asset blocks signify Private Assets. These will use "Private Items" from your Zone.

3 + 4 Yellowish coloured Asset blocks signify Free Folk or Hex Perks. These never need any Items from your Zone.

5 Purple for Assets that are delegated to another Zone. Note that when inspecting the Asset in the Zone where is its physical Hex it will show "delegated" in the top.

6 Pink for Assets that are delegated from another Zone. Note that when inspecting the Asset in the Zone where it is delegated to it will show the name of the Zone where its physical Hex is in the top of its block.

3.9.5. THE ITEMS TAB

This Tab gives you all the core information on what flowed in and out of the Zone Inventory. The in-flows are production from Assets and Items sent from SHQ. The outflows are Consumption by Assets and others (like your Workers consuming Food). If the leftover Items are not necessary for the Zone Inventory, then they will be sent to SHQ.



1 The production will come mostly from your Assets. But some can come from other sources. Mouse over the number to get a breakdown of known sources. The number will be in yellow if production was sub-optimal due to some Asset Consumption Items missing. The number will be red if production was zero due to Items missing.

2 The SHQ will send Items if the Zone doesn't have enough Zone Inventory for Consumption by your Assets, Workers and possible other needs. Mouse over the number to get a detailed breakdown. The number will be yellow if the SHQ was not able to send the needed Items. The number will be red if the SHQ sent none of the needed Items.

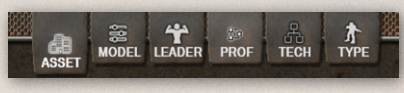
3 Your Assets will consume certain Items in order to produce and your Workers will consume Food. Other consumption may take place as well. Mouse over the number to get a detailed breakdown. The number will be in yellow if Assets were unable to consume all Items needed. The number will be red if none of the Items needed for consumption where present.

4 Any excess Items not needed for the Zone Inventory will be sent to the SHQ. The number will be yellow if not all Items could be sent back (for example due to lack of Logistical Points between Zone and SHQ). The number will be red if none of the Items earmarked for sending back could be sent back.

5 The Zone Inventory at this moment. Should usually correspond with the consumption needed start of next turn. Mouse over this number to also see information on the maximum storage points for the specific Item and how much of it is used by the SHQ.

3.10. THE MANAGEMENT SCREEN

The Management Screen is complementary to your Reports Tab. By using the full screen and some more nifty sorting options it allows you to better analyse some aspects of your Regime.



There are (from left to right) tabs to inspect and manage: Assets in all your Zones (ASSET), all the Models you have developed (MODEL), your Leaders (LEADER), your Regime Profile (PROF), Technologies (TECH) and Model Types (TYPE).

3.10.1. THE ASSET TAB

This Tab allows you to inspect and order all the Assets in all your Zones.



1 If you have multiple SHQs you can choose here which Zones will appear in the list below.

2 All the Zones belonging to the selected SHQ. Click one to have the Assets in that Zone shown.

3 Numerous switches to limit shown Assets to a certain type of Asset.

4 Actual Assets. You can click to have it appear in the bottom (so you can change its orders). Click again to see a detailed information popup.

5 The same orders are available here as in the Bottom Zone Tab.

6 You can either select to review how consumption and production went at the start of this turn or you can select "preview" to have an idea what will be consumed and produced next turn. Furthermore, it is possible to expand or collapse the detailed table (7) with Item in- and outflow information (just like in the Bottom Items Tab).

7 This detailed table present the same information on the selected Zone as the Bottom Items Tab, but on top of that when in Preview mode it also will show you a prognosis of the inventory of your SHQ.

3.10.2. THE MODELS TAB

This Tab allows you to inspect all your Models and in which Units they are present as well as giving you the power to set the Quality Levels of all Models and the Quality Level settings for all your Units. All in one handy screen!

1 Here you can select a Reinforcement Type and all Models sharing that Reinforcement Type will show up in the list to the right (4).

2 You can also select a SHQ and all Formations under that SHQ will show up in the list to the right (6).

3 For inspecting data on the Models you are viewing (4) there are several tabs available to you here to display different information on the Models.

4 It is possible to get a detailed info popup by clicking on a Model's graphic. You can select a Model by clicking on its name. When a Model is selected, the Unit list (6) in the bottom will be updated. To have all Models shown in that list, do not select any single Model (or click on an already selected Model to unselect).



5 Click on a cell in the columns None, Obsolete, Low, Regular, High or Elite to set the Quality Level of the Model to that value. The default value is "None" which will always allow the Model in any Unit. Obsolete is a very severe settings and means this Model will be forbidden to be used by any Unit and if present immediately sent back to SHQ. If a Model is set to Low, Regular, High or Elite its usage by Units will depend on the Unit's Quality Level settings.

6 First item in the list is the SHQ. You cannot change the Quality Level settings for an SHQ. After it follows OHQs (including their Units) and after that, Units attached directly to SHQ. TOT shows the total of all Troops present in the Formation. Depending on if you have a specific Model selected the column next to it either shows TOE. REINF or TOE. MODEL and shows you the total of all Troops present in the Formation that belong respectively to the selected Reinforcement Type or that are the selected Model.

7 Click on a cell in the columns Low, Regular, High and Elite to set the respective Unit's Quality Level settings. Settings can either be set to Allowed

(green), Tolerated (yellow) or Disallowed (red). See Unit administration Order for more information. If a Model is Allowed, it will not be sent back and Replacement Troops of this Model will be welcome in the Unit. If a Model is Tolerated it will only be sent back if it can be replaced immediately by an Allowed Model of the same Reinforcement Type, but Replacement Troops of this Quality Level are not allowed. If a Model is Disallowed it will immediately be sent back to SHQ.

3.10.3. THE LEADER TAB

This tab allows you to inspect all your Leaders. It is especially strong in sorting through the loads of data available on the sometimes many Leaders in your service.



1 The first list box allows you to select which kind of statistics you want to make accessible for (de)selecting in the second list box (2).

2 The second list box allows you to select a statistic or deselect a statistic (or select all or none in one click). Every statistic selected will be presented in an extra column in the Leader list to the right (3).

3 All your Leaders names and Jobs are always shown. The other columns show data selected by you using the lists (1+2) to the left. If you click on a portrait of a Leader a detailed popup will open. If you click on another part of the row the Leader will be selected and be shown in the bottom (5).

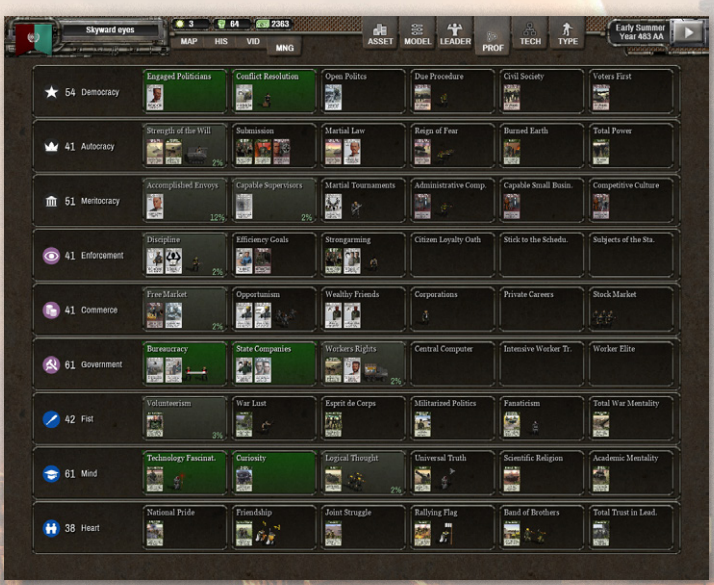
4 You can click on a column name in the top of the list to sort the list based on that column. When you click it and it colours green, it puts the Leaders with the highest values in that column in the top, when you click it again and it colours red it puts the Leaders with the lowest values in that column in the top.

5 When you have selected a Leader in the list (3) he or she will be shown here, and you'll be provided with a Call button and a button to play a Stratagem on the Leader.

3.10.4. YOUR REGIME PROFILE TAB

This tab allows you to inspect all your Regime Feats as well as the Regime Feats you could acquire.

For each Regime Feat the name is shown, the Stratagems that are unlocked with it are shown and the chance to gain or lose it is shown. Use mouse



over to get more detailed information on the advantages a certain Regime Feat brings.

A Regime Feat can be several colours:

- Dark gray meaning you do not have the Regime Feat and your Profile is not high enough to acquire it.
- Greyish green meaning you do not have it yet, but you could acquire it. The % shown in the bottom right is the chance you'll acquire the Regime Feat next start of turn.
- Deep green meaning you currently have this Regime Feat and are not about to lose it.
- Greyish red meaning you have the Regime Feat, but due to a low Profile score you could lose it. The % shown in the bottom right is the chance you might lose the Regime Feat at the start of the next turn.

3.10.5. THE TECH TAB

This tab allows you to inspect the Tech tree and at the same time see what you have already Discovered and Researched.

You'll notice several blocks connected by lines. Each block is a Tech Type Group. It can be displayed in the following colours:



- Dark gray meaning you do not yet have access to discovering Techs in this Tech Group
- Greyish green meaning you do have access to discovering Techs in this Tech Group
- Deep green meaning you not only have access to this Tech Group, but you have mastered it, giving you access to discovering Techs in all connected Tech Groups (you need to have researched three Techs in a group in order to master the Tech Group).

Within each Tech Group, the individual Techs are shown. Their background follows sort of the same colour scheme as above. If it has a dark gray background it means the Tech cannot be discovered yet. If it has a greyish green background, it means it has not been discovered yet. If it has a yellow background, it means it has been discovered but not yet (fully) researched. If it has a deep green background, it means it has been fully researched.

You can mouse over each Tech to get some more info.

Note also that for each Tech, the council is indicated for discovering and researching it. "Ec" stands for Economic Council. "Mi" stands for Military Research Council and "Ap" stand for Applied Sciences Council.

3.10.6. THE MODEL TYPE TAB

This tab allows you to inspect the Model Type tree and at the same time see what you have already Discovered and how many Models you designed of each Model Type.



Each Model Type appears in a block with a different background colour.

- Dark gray meaning you do not yet have access to discovering this Model Type yet.
- Greyish green without a Model graphic meaning you have not discovered the Model Type yet, but could do so.
- Deep green with a Model graphic meaning you not only have discovered the Model Type, you also have designed at least one Model of this Model Type.

The lines between the Model Type tell you the pre-requisites for discovering a Model Type. You can also find this information by using mouse over.

3.11. THE HISTORY SCREEN

This screen allows you to review all the moves that were observed (depends on recon) by you between the end of your previous turn and the start of your current turn.

It provides some basic navigation tools in the form a list bar that shows you in which step of the history log you are and some buttons to play the steps automatically (Play) or stop that (Stop). You can also use Next Battle button to fast forward to the next battle and the Next Regime button to skip the moves of the Regime your current history step is at.

Note that this screen is also used if the Prefs option Show AI Moves is enabled and in between your turns. It allows you to watch history steps as they are being created.

3.12. THE VIDCOM SCREEN

This screen is shown (if any Vidcom messages are present) after you start your turn. You can go back to it later as well. It serves the simple purpose of showing you the most important events that occurred between your last end of turn and your current turn.

3.13. VARIOUS POPUPS

There are several buttons in the Interface that can open Popup Windows.

3.13.1. THE LEADER POPUP

This Popup allows you to inspect all the details on a Leader that are available. You can always get there by clicking on the portrait of one of your own Leaders.



1 The name and current Job of the Leader. If the Leader has an Advisor attached or is advising another Leader that will also be shown here. Furthermore, there are buttons to the right to Call the Leader or to play a Stratagem on the Leader.

2 Some basic data on the Leader is given as age and sex. Relation level is shown as well and if you mouse over the Relation level you'll also get information on the Natural Relation Point and how that value has been calculated. The Seniority Rank varies between 0 and 100. 100 means it is the most senior Leader and 0 the least senior Leader. Suitability Rating gives you a quick idea how well suited the Leader is to his/her current Job. The three Ratings give you the highest Skill in the respective Skill Family. So, TR shows the highest Technical Skill Family Skill Level, CR shows the highest Command Skill Family Skill Level, IPR shows the highest Interpersonal Skill Family Skill Level. The background colour of the Ratings corresponds with the background colour of the Skills (7) below, as well as with the background colour of the Stat (6) that modifies that Skill Family.

3 Each Leader has its own agenda. Well, most have. They have likes and dislikes for some Profiles. Green colour and a "+" sign means the Leader likes a high value for the stated Regime Profile. Red colour and a "-" sign means the Leader would like to see a low value for the stated Regime Profile.

4 If the Leader is a member of any Faction it is shown here.

5 The personality of the Leader is shown here.

6 The Stats of the Leader are shown here. Keep in mind each Skill (6) is linked to a specific Stat and that (if Skill Level is 20 or higher) the whole value of the Stat can be added as a bonus to the Skill. The last value in this row is the Capability Level of the Leader, which influences the potential the Leader has.

7 The list of Skills. If there is a background colour it means the Skill belongs to a Skill Family. There are three Skill Families: the Technical Skill Family (green), the Command Skill Family (blue) and the Interpersonal Skill Family (yellow). There are several columns for each Skill. The "Lvl" column shows the raw Skill Level. Which will be modified positively by bonuses in the other columns, leading to the "Tot" column (short for total) that is the modified Skill Level used in the actual Skill Rolls. Use mouse over to get more information. A * character after the Skill name indicates that the Skill has been used recently.

8 A list of Leader Feats this Leader has. These will usually give a positive modifier on Stats or Skills but can be more varied than that. Use the mouse over to learn what exactly a Leader Feat does.

3.13.2. THE MODEL / TROOPS POPUP

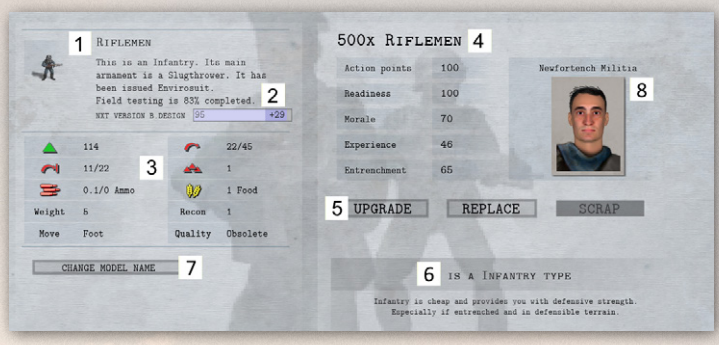
This Popup allows you to inspect some basic details on Troops in your Units or on a specific Model.

It also allows you to perform certain operations on your Troops. Notably: Upgrade, Replace and Scrap.

You can get to this Popup by clicking on one of the graphics of your Troops in the Unit Tab or by clicking "more info" on a Model.

1 The name of the Model is shown together with a graphic and a quick description of the variants the Model has been equipped with.

2 Field Testing will start at 0% and the more combat the Troops of this Model will see the more it will go up. Its effect is an increase in the Basic



Design Model Stat. This will not impact the combat value of the current Model, but it will impact the combat value of any new version of the Model you might design.

3 The basic combat and other stats of the Model. Hitpoints and Attack values are shown, as well as Ammunition consumption, Food consumption and many others.

4 If Troops of a Unit have been clicked they are shown here. There Action Points (AP), Readiness, Morale, Experience and Entrenchment are shown. Keep in mind they may be different than the values shown for the Unit as a whole, which uses average values.

5 Here you can choose to perform Upgrade, Replace or Scrap operation on the Troops.

6 The Model Type the Model belongs to.

7 The option to rename the current Model with a name of your choice.

3.13.2.1. UPGRADE

Allows you to transform the current Model of the Troops into a better Model. Many Model Types cannot be upgraded, but Infantry for example can be.

3.13.2.2. REPLACE

Allows you to keep the experienced Troops in the line, but replace their equipment or vehicles with those of a newer Model. The old equipment will be sent back to the SHQ and manned with new Recruits.

3.13.2.3. SCRAP

The Troops will be returned as Population and part of the production costs will be recuperated by Zone.

3.13.3. THE ADVICE POPUP

This Popup will pop up in the early turns of your game if Advice has not been disabled in Prefs.



1 If advice is available (note the number between brackets in the button) and the Popup is not being shown currently, and Advice has not been disabled in Prefs, you can click here to open the Advice Popup.

2 If you want to temporarily hide the Advice Popup click here. If you want it back again, you'll be able to click on the "Advice" button in the top (1).

3 Pressing "Del" for "Delete" will remove this specific advice type for the remainder of the game.

4 Pressing "Dismiss" will remove this specific advice type for the current turn.

4. HOW TO PLAY

The Interface chapter basically already explains how to access all the functionality of the game. But it does not tell you how you should play. Or better: how the designer of the game would play, because you are of course free to play as you see fit.

4.1. BASIC MOVEMENT AND COMBAT 101

You'll always start the game with at least some Militia Units. Let's show you quickly how to move those Units around and how to attack some enemies.

4.1.1. MOVING A UNIT

A default game will start you in a setting similar to the screenshot below:



To move a Unit:

1 Ensure you are in the Move Order Mode. If not, press the "M" key or go to the Map Order Modes Tab on the right side of the screen and press the Move Order Mode button.

2 Left click on the Unit you want to move. After you do so, all the Hexes the Unit can move to will be highlighted in white.

3 Mouse over the Hex you want to move to. You'll see a movement arrow appear. Right click on the Hex to execute the move.

Note that the number of Action Points the move costs are shown in the bottom right of the map.

4 Keep in mind you can see the Action Points available for the Unit among its Statistics.

4.1.2. ATTACKING AN ENEMY UNIT

This can be done at the start of game with any unaligned forces. If however there are only Minor or Major Regimes around you, you will first have to declare war (see the next section).



To attack a Unit:

1 Ensure you are in the Move Order Mode. If not press the "M" key or go to the Map Order Modes Tab on the right side of the screen and press the Move Order Mode button.

2 Move any Unit next to the Unit you want to attack.

3 Now left click on one of the Units you want to attack with. After you do so, all the Hexes the Unit can move to will be highlighted, but Units that can be attacked will get a red arrow shown on top of them.

4 Now Right click on the Unit (with the red arrow on its Hex) you want to attack. When you do so the Combat Popup will appear.



In this popup window you can inspect your possible attack.

1 The Unit you initiated your possible attack with is already added to the list of attacking Units in the attacking forces box.

2 If you want, you can add other attacking Units by clicking on Units in the eligible Units box (you can remove Units from the attacking forces box by clicking on them as well).

3 The odds are an estimate of whether the combat will go in your favour. It shows attacker strength: defender strength… ideally the attacker strength will be higher than the defender strength. Like 2:1, 3:1 or even better 4:1 (keep in mind it is an estimate and lack of recon and oddities of battles might give different results than expected).

4 If you like the odds you go ahead and press the "Attack" button. This will actually launch the attack with all the Units in the eligible Units box.

5 If you do not like the odds or you have changed your mind just press "Cancel" and you'll go back to the map.

4.1.3. DECLARING WAR

Diplomatic events can cause you to be at war, but you can also actively choose to go to war yourself. To do so you do the same steps as you would attacking a Unit or moving into a Hex.

If the move you are doing is not allowed because you are not at war with the Regime owning the Unit or Hex you'll get a popup asking you if you want to declare war.

4.2. MILITARY CONQUEST 101

Though in theory it is possible to co-win the game by making an alliance with the winning player, in practice that is a very risky strategy and you better focus on military conquest to win the game.

4.2.1. INSPECTING YOUR INITIAL FORCES

A default game starts drops you in the game with only some Militia forces under your command.



Above we see a typical game start state.

1 The Units initially at your command are 4 Militia battalions and 1 Militia regiment (note it has more Troops) as well as your Strategic HQ (SHQ).

2 When selecting a Unit, you can see if it contains Regular Troops (REG) or Militia Troops (MIL).

3 As long as your Militia Units stay in HQ Power Range they'll be able to receive positive effects from Operational HQ Skill Rolls. Note that SHQ Skill Rolls always apply irrespective of range between Unit and HQ.

4 Note a non-aligned Unit close to our City.

4.2.2. CREATE SOME SAFE SPACE AROUND YOUR CITY

Having enemy Units (like non-aligned Units) close to your City will give your initial Zone so-called Danger Points. Claiming about 2 Hexes around your City should remove any such effect.



Your Militia forces are weak. Best used for defence. So, when you use them in an offensive role try to mass them. Also, for an optimal chance of success, try to attack with Units that have full Action Points.

Each Combat Round costs 10 Action Points, so the more Combat Rounds the fight can continue the more chance you'll take the Hex. Furthermore, during the initial two Combat Rounds the defender has an extra advantage (as your Troops are closing the distance), so that is another reason to avoid short indecisive battles.



During the AI turns the non-aligned forces launched their own attack against one of the Militia Battalions. As you can see our recon was faulty, their Unit did not contain 700 Troops, but 2400 Troops instead! Always keep this FOW effect in mind (unless you have really a lot of Recon Points on the Hex).

After you order an attack, the Combat Selection Popup will appear. Giving you a wealth of information on the modifiers as well as an estimate of the odds. These odds are an estimate that you should take with a grain of salt.



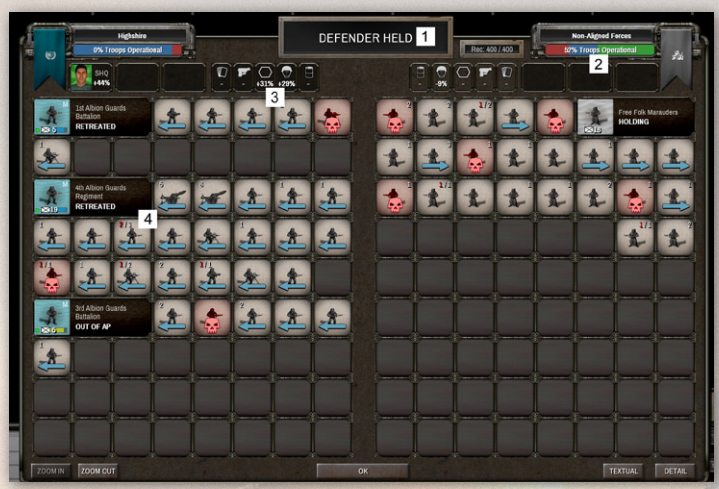
However, if the color turns bright green you'll be sure you'll win and if turns bright red you'll be sure you'll lose.

1 Note all Militia forces are ordered to join the attack, trying to mass as much Troops as possible. The Motorized Militia Unit (truck symbol on counter) sadly does not have the Action Points to enter a sand Hex (trucks don't drive well in loose sand).

2 Whenever possible try to attack from as many angles as possible. By attacking from three sides in this example the Militia has secured a +40% bonus. That might just make the difference.

3 At 2.2 : 1 odds this is going to be a very "iffy" battle. Could work however.

4 Also note that due to our lousy Recon we are probably overestimating the size of the enemy Unit (which in the history report was at 2400 Troops).



The battle was almost won…

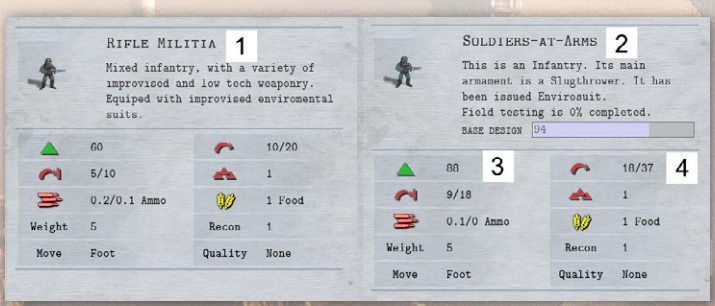
1 The defender held. The Hex has not been taken.

2 Note that it was a close call though. The defender would probably have retreated if its operational Troops had dropped below 50%.

3 Our Troops got some good modifiers from the SHQ Commander, Concentric Attack and Experience.

4 Note this particular heroic Subunit that scored 5 hits on the enemy (of which 2 kills).

4.2.3. RAISE SOME REGULAR TROOPS



I think the above section illustrates the limited value of Militia Troops in an offensive role.

1 To the left we see the statistics of Militia Infantry.

2 To the right we see the statistics of the Regular Infantry Troops.

3 Note that Regular Infantry has almost 50% more hit points.

4 Note that Regular Infantry has almost double the attack values.

For this reason, it is a good idea to Raise some Regular Troops Units. They'll perform about 2.5 times better than their Militia brothers (However, keep in mind they'll be recruited at 0 Experience Points).



Using the "Raise Formation" order we can raise some new Units. We do not have enough Recruits at the moment to recruit a multi-unit Brigade under its own HQ so an Infantry and a Buggy (car with MG) Battalion are raised. Note you can increase the recruitment of Recruits by calling the Governor of a Zone to tell him/her to recruit more.

These buggies are an excellent complement to the existing Militia since they have good attack values.



Above is an attack that is sure to succeed. Note the newly recruited Regular Units augment the Militia forces enough to have enough punch to brush aside those pesky Free Folk Marauders.

4.2.4. IMPROVE MORALE OF REGULAR TROOPS



While waiting to make our Zone produce some more Recruits, let's try to improve the Morale of our Regular Troops. You can do this by calling your Secretary and asking him/her to prepare a Decision on salaries.

On default mode, your Regular Troops get their rations and the rest is payment in gratitude and the honor to serve the nation.



If you give them several micro-Credits per round, that will improve their Morale. Higher Morale will keep them in the fight longer and be less prone to panicking, especially with certain Postures this will be important.

4.2.5. RAISE A MULTI-UNIT FORMATION

Once you have enough Resources (Items) and Recruits you will do well to recruit a multi-unit Formation with its own Operational HQ (OHQ).

You'll be able to assign a Commander to an OHQ and his/her Skill Rolls will add to your combat bonuses. Furthermore, you can play Posture Stratagems on your OHQs. These also can give combat bonuses. The combined effect of OHQ Commanders and Postures is such that you should try (in the future) to have the majority of your forces under OHQ command.

There is not much choice at the start. So an Infantry Brigade is an economic choice.



Note that to get more Formation Types to choose from you'll have to discover and develop more Models (like Light Tank, Artillery, etc..) using the Model Council and also operationalize new Formation Types using the Staff Council.

4.2.6. ASSIGN A COMMANDER



1 Here we see our newly raised 1st Light Infantry Brigade.

2 When just raised there is not yet a Commander assigned.

3 The round after you raised the Unit a selection committee will have prepared a Commander selection list for you to choose a Commander from.

4 Note that sometimes the most suitable candidate is not presented to you for political reasons of the selection committee. You can dismiss candidates at a small Political Point cost.

Keep in mind that if you want to change a Commander you'll have to call and dismiss him/her.

4.2.7. PLAY A POSTURE STRATAGEM



In the Stratagem Tab under the "HQs" category you'll usually have some Posture Stratagems available that can be played on OHQs.

To generate more Posture Stratagems, you had better get a Staff Council operational and give a lot of budget to their Posture Task.

In the Stratagem Tab, you pick the Posture Stratagem you want to play and select the OHQ to receive it.

Here we are assigning a Posture that is going to give a big boon on defensive operations. +50%. However, the flipside is it will be hard to use Units with this Posture in offensive operations.

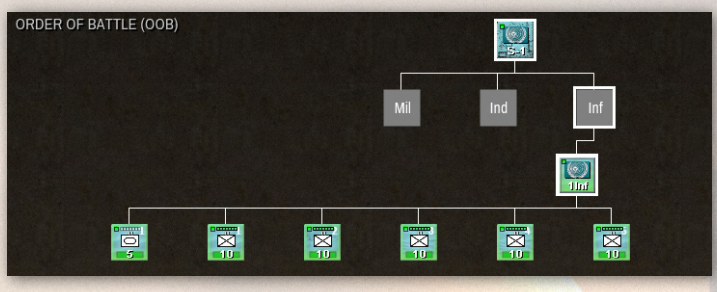
Our 1st Infantry Brigade is ready to hold the front! Commander and Posture present.



4.2.8. ASSIGNING AUXILIARY UNITS TO AN OHQ

Independent Regular Units start under an SHQ, but each OHQ has a limited number of slots (usually 2) to take command of auxiliary Independent Regular Units.

To do this select the Independent Unit and click the Unit Admin Order to assign it to an OHQ of choice.



Our 1st Infantry Brigade can also be inspected in the OOB Tab, like above, and here we see it and its 5 battalions, but with an added Auxiliary Unit. This Auxiliary Unit will now also benefit from the Commander and Posture bonuses.

4.2.9. KEEP AN EYE ON AMMO, FUEL AND FOOD



Every round your Troops consume Food. And when they move or fight they can use Fuel. During battle (especially offensive action) they'll use Ammo.

Keep an eye on your SHQ Item stocks:

You can produce Items using your Assets or buy Items from the Traders.

Also, some Items (like Ammo and Machinery) can be produced by using the Workshop Order.

4.2.10. KEEP AN EYE ON YOUR LOGISTICAL NETWORK

By using the Logistics Layer Buttons in the Layers Tab to the right of the screen, you can inspect your Logistical Network as it formed at start of your turn.



1 Above we see the Logistical Points that have been generated in your Logistical Network. Note they stop well short of the Advanced motorized Militia Units to the South-East.



Here we see the actual Logistical Points that have been used to supply our Units (and possibly Zones).

1 This is the last Hex that has Logistical Points on it. This is the point where the Units will need to pick up the supplies they need.

2 The dotted lines show Operational Logistics of the Units. At this point a Unit would have been able to use its own Operational Logistics to pick up all the supplies it might need at point 1.

3 The actual location of the Units however is too far away from pickup point 1 and hence it is receiving less than it is requesting.



Note that this Militia Unit only received 2 of the 4 Fuel and 5 of the 9 Food that it requested.

There are two solutions here… For the present it would be wise to move back the Units to point 2 so that they will be fully supplied again. But after that it would be wise to extend the Logistical Network to facilitate further conquest.

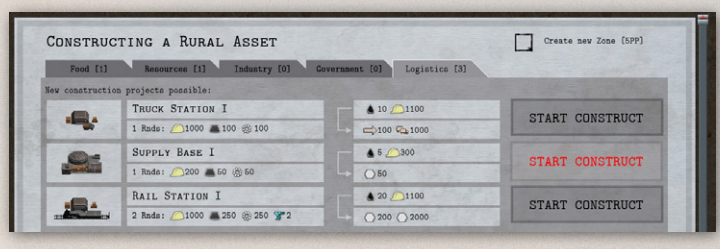
4.2.11. EXTENDING YOUR LOGISTICAL NETWORK

This you can do by constructing either (1) new Logistical Point Sources like Truck or Train Stations or by (2) extending the range of existing Logistical Point Sources by constructing Supply Bases.

To construct a new Logistical Point Source, use the Construct Asset Order. Probably preferably on the City Hex of the Zone.

To construct a Supply Base, pick a Hex that is still receiving a good number of Logistical Points (they go down quickly after they go beyond the AP Range of their source).

As you can see Supply Bases are cheap and quick to construct. They do not actually add any Logistical Points to your Network, but they extend the range of the existing points entering the Hex with the Supply Base.





After the Supply Base has become operational and its effect applied to the Logistical Network we see we have extended our range.



1 The Logistical Points that enter the Hex with the Supply Base are receiving +50 AP extra range.

2 This allows plenty of points to arrive 5 Hexes further. After which they decline quickly again.

The advance Units now are in full supply again.

4.3. BUILDING AN ECONOMY 101

In the previous 101 we discussed Military Conquest, which is without doubt a very important activity.

However, to supply them, to produce Replacement Troops or to raise new Formations you'll need Industrial Points and Resources. Here the economy part comes in.

4.3.1. ASSETS

At game start with the default options you'll have a tiny but usually functional economy.



Here in the bottom you see the Assets present in your initial Zone. There are different kinds of Assets you can have.

1 Public Assets. These are the ones you can construct yourself using the Construct Order. They require you to pay and feed Workers. You have full control over them.

2 Private Assets. These have been constructed by the Population of your Zone and are not in your control. The Private Economy makes its own decisions on what to construct. However, almost all Private Assets send a part of their production to you as a Tax.

3 Free Folk settlements. The Free Folk are people who live in the territories you have claimed but who remain independent and have not yet joined your Population. If your economy is running well and your Population is happy they will join you in large numbers. Especially in the early game, they are a key source of Population increase.

4 Hex Feats. These are special artefacts or sites that provide a simple and fixed bonus to a site.

Except for Free Folk settlements, all Assets can require input and will provide output.

5 Input is the Resources and/or work force that the Asset has consumed to produce or perform its task.

6 Output is what an Asset has actually produced.

4.3.2. GAME START

In the game start example used in the screenshot below, we are receiving 132 Food from the Private Farm which is enough to feed our initial Workers. 100 Workers require 1 Food. We have plenty of Energy arriving from our Hex Feat, a damaged but still functional Galactic Republic Generator.





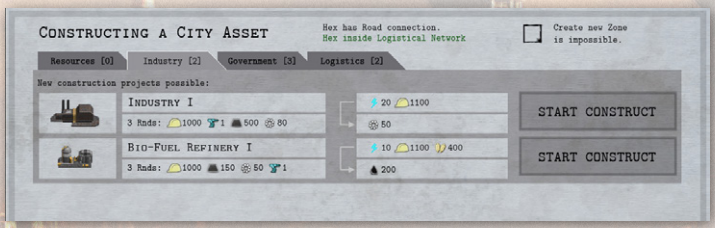
In the Items Tab of the Zone we can see this as well. The Zone is only producing Surpluses. Or in other words: consumption is lower than production. Most of the surplus (if some Zone reserves are not merited) will be sent to your SHQ.

We can see these items have arrived in our SHQ above. The Items in our SHQ can be used to produce Replacement Troops and to raise new Formations. The SHQ can also sell the Items to the Traders (or buy from them of course).

4.3.3. CONSTRUCTING ASSETS

After playing some turns and maybe raising some Troops, you might realize you need more Items like Industrial Points or Food.

There is (even at low tech level) plenty of choice of Assets you can build. In the example below, I selected the Construct Order and am going to choose to start construction of an Industry Asset.





In the Construction Popup the construction Costs are shown as well as the Input and Output of the Asset when it is completed.

It will take several turns to complete the construction of the Industry Asset. Note that it requires lots of Metals.

4.3.4. DIFFERENT PUBLIC ASSET TYPES

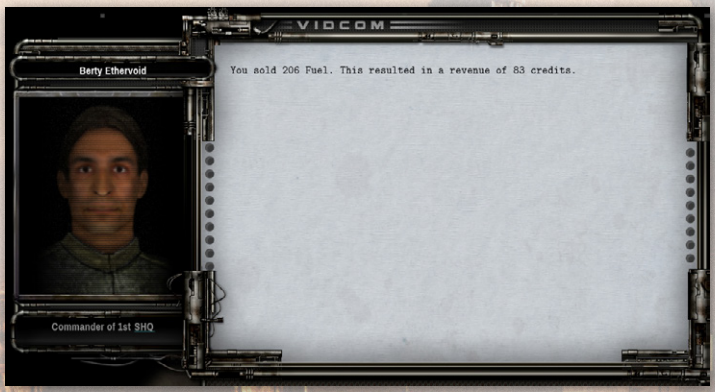
Click on an Asset (in bottom or in popup) to get more information on it.

Notably, there are Asset Types that can be built only in your City Hex (like Industry or Bureaucratic Offices) and Assets that can be built anywhere.

Mines can only be built on top of Hexes with their corresponding Deposits. Wind Traps only in mountain Hexes. And Volcanic Taps only on volcano Hexes.

4.3.5. TRADING

In this game example, I am only producing about a 100 Metals a turn, while completing the Industry Asset requires 1,500 Metals. I could have constructed some more Scavenging Assets first, or maybe a Metal Mine (if I had found deposits), but here Trading can come in handy as well.



Using the Trade Order, a SHQ can sell excess Items to the Traders and use the proceeds to buy the Metals that we need.

Keep in mind that prices go up with an excess of demand and go down with an excess of supply. The Traders of your Zones also trade with Zones owned by other Regimes and there is a real planetary economy running.

4.3.6. WORKSHOPS

In case you can't find Machinery with the Traders, you can use your workshops to produce them. Eventually you will have to construct Heavy Industries to fabricate machines in a more efficient fashion.

The Workshops can also be used to make Ammunition, which you'll only need once you get in a shooting war. Especially offensive combat consumes a lot of Ammunition.

4.3.7. CREDITS

To pay more Workers (once you have more Assets) or to buy from the Traders what you need, you'll need Credits. A key source of obtaining these is from Taxing your Zones.



You receive Service Tax and Income Tax from your Population. Other taxes in the game are Sales Tax, that will be paid by the Traders and Tariffs, that will also be paid by Traders if they engage in Imports/Exports.

However, keep in mind that the more you Tax your Zones the more you'll stifle the development of the Private Economy.

4.3.8. PRIVATE ECONOMY

There is some detailed modelling going on of the Private Economy and your Population will save Credits and Food (for emergencies) as well as invest their saved Credits in new Private Assets. Furthermore, they'll spend Credits on fabrication and consumption of luxury goods. They'll even be able to Mothball or close Assets when there is not enough Population to man all Assets. What you need to know for now is that this is all mostly beyond your control.

The only ways you can impact the Private Economy is by taxation, providing Emergency Food and investing Credits in the Private Economy (through calling your Governor and giving Zone Orders), though plenty of Stratagems and Decisions can also have an impact.

The Private Economy is a great source of Quality of Life (QOL) for the Zone because the moment the Population is in the safe zone concerning Food production, the Population will start focussing a lot on Health, Education, Entertainment and Security Assets. They want to have a nice life.



Here above is an example of some typical early Private Assets. Note the Arena and the Museum which provide Quality of Life points that will eventually raise the Civilization level of your Zone and as a consequence determine your Regime's Civilisation Level.

You can usually only build one Asset per Hex of a certain type. If there is already a Private Asset in place in your Hex, which is blocking you from constructing a Public Asset, you have the option to nationalize it. This costs

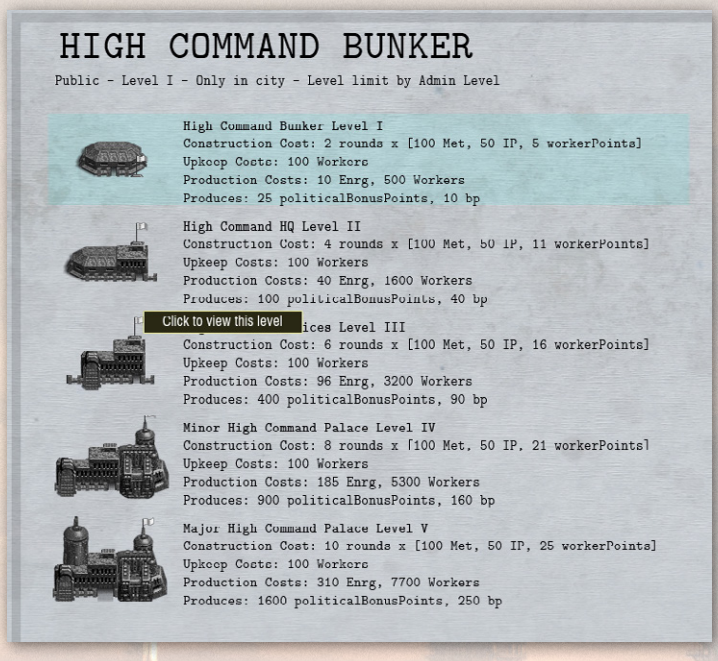


some Credits and might very well cause some unhappiness but will gain you the corresponding Public Asset.

Here the Private Scavenging Asset is nationalized (costing 500 Credits) into the Public Recycling Asset.

4.3.9. ASSET LEVELS

Almost all Assets can be upgraded.



But keep in mind that the highest Asset Level available for upgrade is the same level as the Level of the City. So small villages can only construct Assets up to Level 1 for example, whereas huge cities can go all the way up to Level 7.

Also note that there is a second limiting rule and each Asset Type is limited either by your Regime's Tech, Admin or Civilization Level. For example,

Bureaucrat Offices Level is limited by your Civilisation Level and Industry Level is limited by your Tech Level.

4.3.10. GOVERNORS

Keep an eye on your Relation with your Governor.



If the Relation is above 50 you get a sizable production bonus, while it being below 50 gives a penalty. Consider paying Governors well (you can set salaries by calling your secretary).

Apart from your Relation with a Leader, also consider which guy to pick for Governor as his Skill set can impact production positively as well as help a lot with some troubles that can occur in Zones.

Take care with events… as a lot of bad stuff can happen if Unrest is high or Happiness is low. Strikes and protests can impact production. A strong army presence in the City of the Zone or an able Governor with good Interpersonal Skills can help a lot to mitigate negative effects.

4.3.11. PRODUCTION MODIFIERS

Keep an eye on production Modifiers. Already mentioned are Governor Skill and Governor Relation, but there are some notable others.

In case of Mining, the ease of mining of a deposit plays an important role. Some Deposits are not easy to extract because for example they are deep or in difficult geological layers.

This is also the case in respect of Open Farming. Here the temperature and rainfall of the season will play a role, as well as Planetary conditions such as Atmospheric compatibility and possible Biohazards.

Last example: Wind Traps for example perform better if there is more moisture in the air on your Planet.

Be sure to always read the description of an Asset Type before constructing it to avoid disappointment.

4.3.12. MINING

There are a number of resources that have to be mined to obtain them. These are: Metals, Rare Metals and Radioactives. On waterless Planets, mining Water deposits is also a good idea.

It is important to know that you can only construct a Mine on top of a Deposit. And you need to find these Deposits first. This requires you to either add an Economic Council (with the Prospecting Task) to your administration or to appoint a Governor that has the Prospecting Skill.

4.3.13. LOGISTICS

There is a separate chapter in this manual on Logistics. Especially once you have multiple Zones, you will need to pay attention to the Logistics as one Zone might produce surpluses for the shortages of another Zone. But for your single Zone you'll just need to keep track of one thing concerning your Assets.

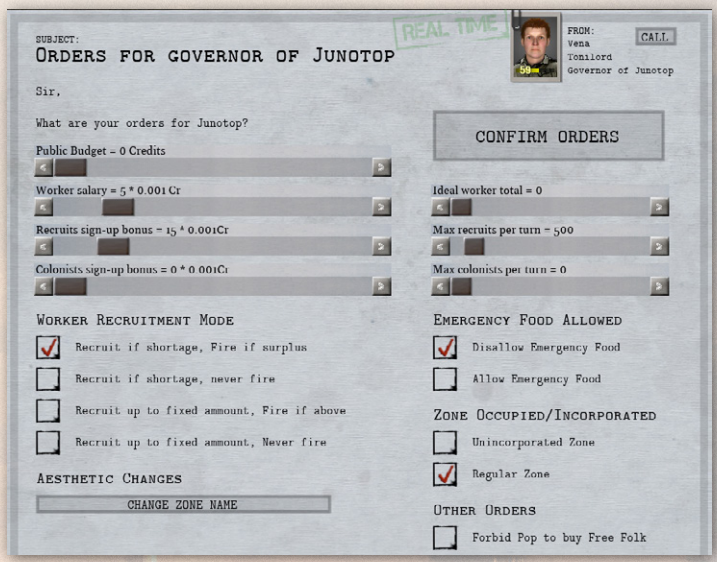
For a Public Asset to have unimpaired production or construction progress it needs to be on a Hex that has at least 100 Logistical Points for each Asset Level at the start of the turn on its trajectory to its City. For Private Assets its only 50 Logistical Points per Asset Level.



Above we see the Logistical Points at the start of turn. And we can see that the road from the Farm Level 1 in Monroe to its City (Junotop) has always at least 193 Logistical Points. Its production is at 100%.

4.3.14. WORKERS

You need enough Workers in your Zone to fill all the positions at your Public Assets. The default mode of Worker recruitment is to recruit if there is shortage and fire if there is a surplus. However, you can fine tune your Zone Worker policy by calling your Governor and giving him Zone Orders.



You can also improve the Workers' salaries which will help a lot in improving their Happiness, as well as with their recruitment.

You should keep a special eye on what you are paying your Workers compared to the average revenue made by your Population in the Private Economy. A lower pay might tempt Workers to quit and seek their fortune working in a Private Asset.

4.3.15. TECHS

Many Assets can be unlocked or benefit from increased production by adding an Economy Council to your administration.



If you have the Bureaucratic Points (BP) to spare you can discover and research many more civilian Techs (compared to the Military Research Council) here.



Note in the Tech tree that early Assets you can unlock are: Power Plant, University, Solar Panels, Hospital, Barracks and a whole family of Storage

Assets. The "Ec" in the screenshot above notifies you need the Economic Council to discover and research the Tech and the "Mi" notifies you need the Military Research Council.

4.4. LEADERS AND FACTIONS 101

You are the supreme ruler. Picture yourself as an armchair general behind a desk. Or a man in shadows on a fancy chair with a cat on his shoulder.

You rule by giving orders to your Leaders. Some are unseen (like the leader of a non-HQ Unit) but the important ones have a name, a portrait, statistics and a personality. And most importantly a Relation score.

The key jobs you'll give your Leaders are Director (for Councils), Governor (for Zones) and Commander (for HQs).

No matter what job one of your Leaders is doing, he will do his/her job better if your Relation with him/her is good.

4.4.1. LEADERS

When you start a new game, it is a good idea to inspect what the roll of the dice gave you. Take a look at your Leaders and Factions to orient yourself on your human resources.

POR	NAME	JOB	REL	CAP	SUIT.	LOY.	SEN.	TR.	CR.	IPR.	FAC
	Marlow Davis	Commander of 1st SHQ	75	IV	50	64	90	-	63	-	DP
	Aries Bulkhoad	Advisor	83	III	36	65	50	-	-	68	DP
	Simon Alifort	Secretary	67	I	3	60	37	-	-	-	-
	Acadia Cryomate	Reserve Pool member	66	I	-	57	23	-	-	-	MSF
	Ian Copernicus	Director of Supreme Command Council	82	II	12	73	63	34	-	3	MSF
	Bella Clarke	Governor of Epsilon	76	II	32	69	77	36	-	48	-

In the Personnel Overview report, we get a quick overview of the Leaders we start out with.

First thing to note here is the Capacity Level (CAP) which gives a quick indicator how able a Leader is (or can become). But after that you should

look at their Ratings. They have 3 ratings: Technical Rating (TR), Command Rating (CR) and Interpersonal Rating (IPR).

It is a good idea to determine if they are assigned to Jobs that suit them well. You'll start with a Zone Governor, a Council Director and a SHQ Commander.

Your Zone Governor ideally has good TR and IPR.

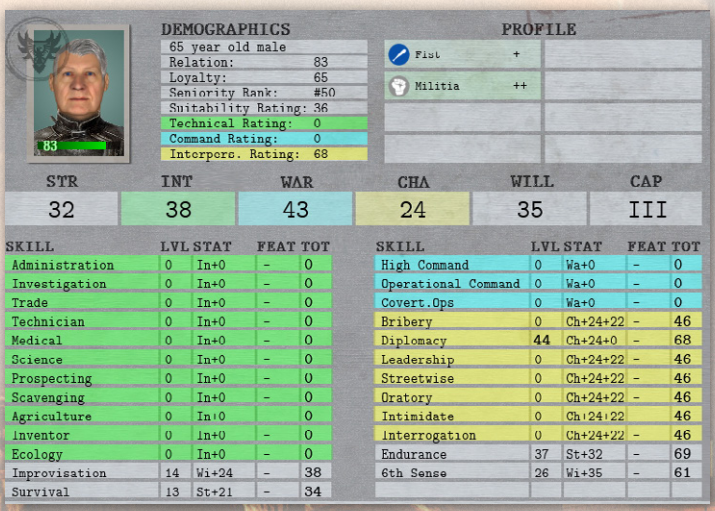
Your Council Director should have just a high TR as he has no reason to put his feet in the mud (and your Populace). Your Commanders should have a good CR, especially your SHQ Commanders.

If I check my list all seems fine. Marlow Davis at SHQ has a CR of 62. Bella Clarke, Governor of Epsilon has a TR of 36 and an IPR of 48. Finally, Ian Copernicus, Director of the Supreme Command Council, which takes care of almost everything at start, has a reasonable TR with 34.

Ideally you assign the most suitable Leader to each job. However, keep in mind that firing Leaders to make place for an appointment procedure the next turn can cause problems. Especially if the Leader you are firing has a high Seniority Rank.

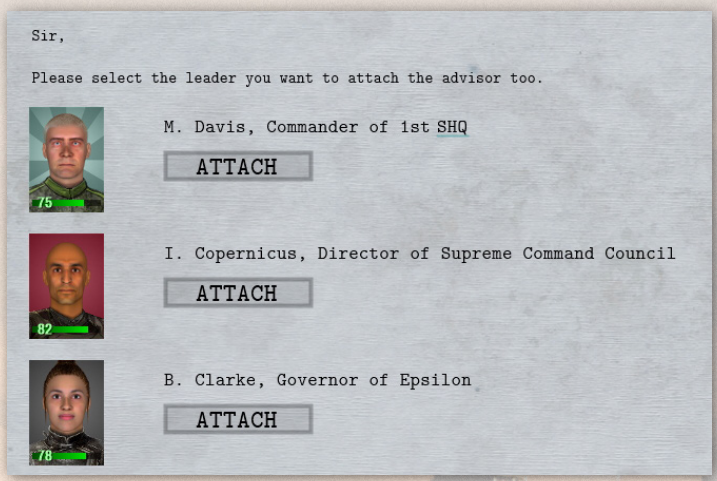
4.4.2. ADVISORS

However, I have noted that our Advisor Aries Bulkhead just has a really high IPR.



And if we look closer at him it is because he has an excellent Diplomacy Skill.

You have a limited number of Advisor positions, initially just one. The thing you can do with an Advisor is to attach him/her to another Leader. An attached Advisor will make the same Skill Rolls as the Leader attached to, but if the Advisor's roll is higher it will be used instead of the lower roll of the Leader he is advising.



This makes it almost a no-brainer to assign him to advise our Director of the Supreme Command Council since it he who'll be in charge of playing any diplomatic Stratagems.

Ideally you always assign your Advisor to another Leader since otherwise you'll not be making use of him/her.

4.4.3. FACTIONS

Another thing you should really inspect at start of your game is what Factions are active among your Leaders.



In this case, we have Democratic Party and Martial Steel Front active. Each has its own Profile. Your Relation with them will improve if you move the Regime Profile in the direction of their likes.

A good Faction Happiness (>60) will give you an increasing chance to receive Faction Stratagems from them, while a bad Faction Happiness (<60) will give you an increasing chance of a problem arising with this Faction.

But maybe more importantly, the Leaders that are members of a Faction will be influenced a lot by their Faction's Happiness in determining their Relation score with you. As a rule of thumb, a happy Faction means happy Faction members.

To get Faction Happiness up there are three main things you can do:

1) Appoint their Leaders to important jobs, and especially the kind of jobs that their Profile likes the most. It also pays to take special care of their Faction Leader, he has more impact on Faction Happiness than other Leaders.

In the case of the screenshot above, it might be a good idea to replace the current SHQ Commander with Acadia Cryomate from the MSF because her Faction likes to get Military jobs. If it was not for the fact that she really has no relevant skills. I am not sure I would prefer a lousy Commander to a happy Faction. But that is the kind of decision you'll have to make yourself.

2) When they make Demands to you, accept them and deliver them as well.

3) When making Decisions, move your Regime Profile towards the Profile of the Faction you want to have increased Happiness.

4) Getting your Word Score up. A noble supreme leader with a high Word Score gives a big bonus to the Faction Happiness of all Factions.

Ideally, you'll try to keep all Factions happy, but if you cannot you should consider choosing which one you'll make happy and which Faction you'll make unhappy.

Try to get as many members of the Faction that's happy on key positions as this will guarantee Leaders with higher Relation scores.

However, circumstances might force your hand.

4.4.4. LEADER STRATAGEMS

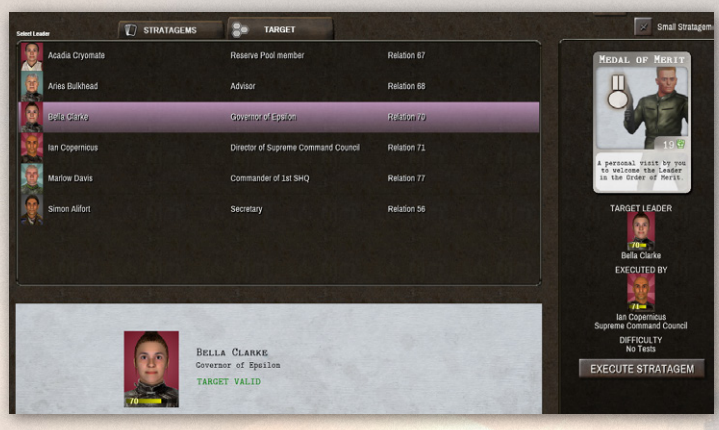
You might end up with a Leader with a low Relation score at some point. Maybe because you are not helping his/her Faction or maybe just because the Leader is too demanding. But if he/she is skilled or doing an important job, you'll want to increase his/her Relation.



First of all, you can do this by calling your Secretary and changing Leader salaries. Higher salaries almost always help getting a Leaders, Relation score up.

But you can also play Leader Stratagems on the Leader. You'll always get some of these, but if you want to have a lot, you should create an Interior Council and invest BP in the Human Resource Task.

For example, our Governor Bella Clarke has a Relation of 70, but we want to get it even higher to get more production bonus in her Zone.



The Medal of Merit is just one of the many Stratagems that can improve your Relation with a Leader. Don't be shy to use them.



After giving her the Medal of Merit her Relation Score went up to with +25 to a whopping 95. And as you can see, this medal gives her a permanent Charisma Stat boost as well.

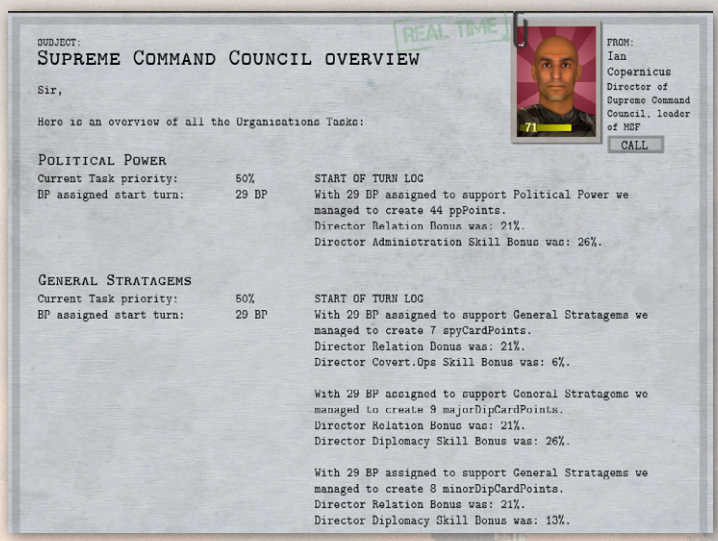
4.4.5. LEADER BONUSES AND SKILLS

A happy Leader will give you direct advantages. Above Relation Score 50, you'll receive bonuses on the work the leader is doing. Below 50, you'll receive penalties. However, keep in mind that if no Leader is assigned it acts as a Relation 0 Leader. So, it is almost always prudent to assign Leaders.

For Governors, the Relation Score impacts Public Resource production levels with up to +25% or -50% (but not other items like BP or Private Items).

For Commanders, the Relation Score impacts XP (training) and Morale levels.

For Directors, the Relation Score impacts the progress of their Tasks.



Above you can see how, especially in your bureaucracy, a good Relation Score gives a big bonus. But you can also see that Skills provide bonuses.

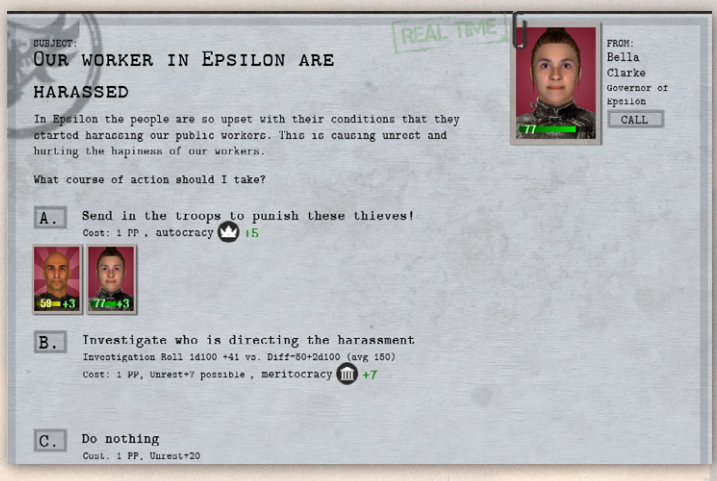
Getting the best out of your Leaders, Skill Rolls means keeping their Relation Score high. A Leader with a Relation Score of 25 will suffer -10 on his Skill Rolls while a Leader with a Relation Score of 75 will get +10 on his Skill Rolls and a Relation Score of 100 will even give +20.

Skills are used all the time.

A Council Director will use Skill Rolls for the different Tasks he is assigned every round.

A Commander will use Skills almost exclusively during Combat. But here the combined weight of his Skills can give huge modifiers and it is often the most capable Commander who wins the day.

And a Governor can increase production of specific Assets if he has specific Skills. The Agriculture Skill for example gives a boost to the production of Farm Assets.



Above we see an event where Governor Bella Clarke has to make a Decision. Note that if you choose option B she will have to make a Skill Roll. It is the occurrence of these kind of events where the presence of a Governor with strong IPR really counts.

4.4.6. ELECTIONS

If your political system is a Parliament or a Senate there will be regular elections. Even if your political system is Politburo there will be, but there will not be much voting going on.

Elections determine what percentage of the Parliament/Senate or Politburo each Faction will control.

These elections do not bring Happiness to the Faction as such. However, they'll decide which Faction will be in the Majority and which Faction will be in the Minority.

It is almost always the Majority Faction(s) which will make a Demand on you.

There are Stratagems available to you that you can produce through the Secret Service Council that will allow you to tinker with the odds of them winning an election by giving them direct support.

Keep an eye on those elections and remember the Majority Faction will get a boost in the elections if your Popularity has gone up.

4.4.7. GETTING RID OF LEADERS

At some point you will find yourself with Leaders that you'll never assign to a job, because their Skills are to low, their attitude is wrong or because they just really don't like you.

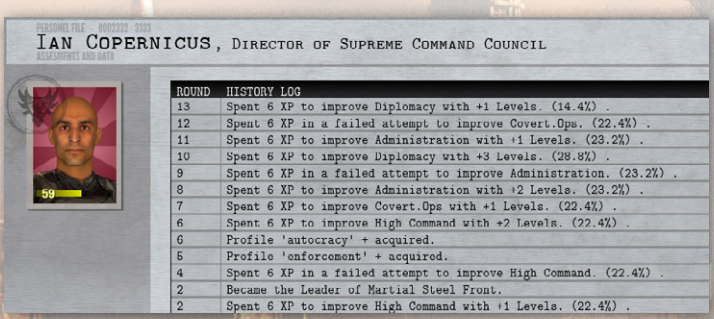
Here Stratagems come in. You can use the Interior Council's Human Resource Task to produce Stratagems that can retire Leaders (at a cost).

Alternatively, you can use the Secret Service Council to produce an Assassinate Leader Stratagem.

It can also be effective to just wait until the Leader is so fed up he leaves (or rebels) out of his own volition.

4.4.8. LEADERS IMPROVE WITH EXPERIENCE

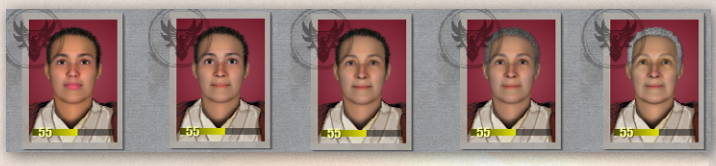
Every round, Leaders will gain more experience. Especially military positions can do miracles here. The XP gained will be spent by the Leader



on one of the Skills he has been using. Over time you'll see the Skill Levels of your Commanders go up.

Above is an example of a Leader gaining some Skill Levels over some Rounds. The higher the Capability Level of the Leader, the higher the Skill Level gain you'll see over time.

Furthermore, Leaders can pick up Leader Feats over time, through events or through Stratagems. Also, Archaeological Finds can help you find strong artefacts that can be given to your Leaders.



To finish on a negative note. Beware when your Leaders get too old and gray… they will tend to lose Stat levels and sooner or later they will be forced to retire from your services.

4.5. LOGISTICS 101

If you have just one tiny Zone and all Assets and Units are in the same Hex as your SHQ you have nothing to worry about.

But once you start expanding there will be many Hexes between your SHQ and your Units, Assets and even other Cities in other Zones.

Your Units will still need Ammo and Food and it will have to be transported to them from your SHQ.

Other Zones under the same SHQ might need Items as well or they might want to deliver excess Items to the SHQ. This also requires transport.

And transport requires a Logistical Network. A Logistical Network is just a fancy word for all the Logistical Points you have "spread over" your roads.

4.5.1. YOUR INITIAL LOGISTICAL NETWORK

When you start a default settings game and after some initial expansion when you switch on the Initial Logistical Points layer (Map Layers Bar) you'll see something like this:



In grey you see the numbers of your Logistical Points. These have been generated by your Logistical Assets and have been spread out over your Road Network at start of turn.

1 The City Hex contains one Logistical Asset (Transport Hub I) and due to its production of Truck Logistical Points the previous turn these have started spreading out from its Hex at the start of the current turn. You can see the City Hex got 400 Truck Logistical Points assigned to it for "spreading-out" and 200 of these followed the road to the south-west and 200 of these followed the road to the north-east. If the City had had only one road leading out of it, all 400 points would have been "spread-out" on that road.

2 The Transport Hub I Asset generates 400 Truck Logistical Points per turn. Note that there is a delay and that these Truck Logistical Points get applied to the Logistical Network the turn after they are produced. You can also see this Asset generates 50 Truck Action Points. These Truck Action Points determine how far the Truck Logistical Points can be spread out over your road network.

3 Truck Logistical Movement costs 12 Action Points (AP) per Dirt Road Hex so with the 50 Truck Action Points generated by the Transport Hub I Asset that means the 400 Truck Logistical Points it generated can be spread out at full-force over 4 Dirt Road Hexes.

4 Note that after the 50 Truck Action Points have been consumed, the Truck Logistical Points still get "spread-out" further, but now quickly lose Logistical Points every further additional Hex they go, until they reach the Hex that costs double the Truck Action Points range to reach, which is the maximum distance the Truck Logistical Points can be spread out to. As you can see in the image at range 4 from the City, the Truck Logistical Points were still applied at full force with 200 Truck Logistical Points, but at range 5 they dropped to 160 and eventually at maximum range 8 they dropped to 40.

4.5.2. LOGISTICAL POINTS ON YOUR HEXES

These Logistical Points on your Road and City Hexes can be used to transport Items. For a transport of Hex A to Hex B there need to be continuous Logistical Points present on the road Hexes between them.



In the above screenshot, the Current Logistical Points Layer has been activated. It shows in green how many points still remain. As you can see, it's less than the 400 Logistical Points in the previous screenshot showing the Initial Logistical Points Layer. This is because some of the Logistical Points have been used to supply Units.

Take for example the 3rd Holotop Guards Unit (1). It required 6 Food Supply (4) to be sent from SHQ (2). This has been fully delivered because there were enough Logistical Points on the trajectory between the SHQ and the Unit. However… if 3rd Holotop Guards had requested, say, 200 Food Supply then only a part would have been delivered because not enough Logistical Points would be present on the trajectory.

Also note that after the initial 400 Logistical Points got divided into 2 and went their own direction, the 200 Logistical Points getting "spread-out" on the road north-east of the City got divided again two Hexes later (3).

4.5.3. INSPECTING DETAILS AND SETTING TRAFFIC SIGNS

We can take a close-up look at that second branching by going into Traffic Signs Order Mode, clicking the Hex in question and then left-clicking it again.



Here we can see in detail

(1) that 200 Logistical Points entered the Hex from the south-west (that is the road that left the City towards the north-east). Arriving at the split in the road it sent 100 Logistical Points up north and 100 further forward north-east.

(2) To set a Traffic Sign click on one of the percentage buttons. The % mentioned is the amount of Logistical Points that will be blocked from going in that direction. The sign will affect everything flagged in the buttons above (3).

(3) To limit a Traffic Signs effect to a certain operation you can flag/unflag different operations.

(4) You can add Custom Pull Points to a Hex or choose to block the use of any Automatic Pull Points.

(5) You can disable some or all Automatic Pull Points. Your settings will be remembered next time you start a game.

If you have many crossroads, you'll see your Logistical Points will dilute quickly. For this reason, you can place Traffic Signs and block all or a certain percentage of the Logistical Points being "spread-out" to travel in a certain direction. To illustrate this, we are setting a Traffic Sign on the road leading to the north to block "All" Logistical Points.



Here above we can see the Traffic Sign in place on that road junction. The effect will be applied when the Logistical Network is created again start of next turn.

In the next turn we see that all the Logistical Points to keep following the road leading east.



4.5.4. EXTENDING YOUR LOGISTICAL ACTION POINTS

At the fringes of our Logistical Network (between range 4 and 8 from the City) we see that the number of Logistical Points is getting low and at range 9 it disappears.

The cheapest way to extend your Logistical Network just a little bit is to build a Supply Base on just the right spot to extend the "spreading-out" of the Logistical Points of the Transport Hub I Asset.



The selected Hex (1) above would be the ideal Hex for a Supply Base as it is still (just) within the 50 AP Truck Range of the Transport Hub I Asset and when completed can thus extend the full Logistical Points passing through the Hex 50 Action Points further than otherwise would be possible.



Above we can see how the Initial Logistical Points are being "spread" twice as far as before due to the 50 Truck AP Extension Points produced by the Supply Base. Note that as with Logistical Points, Extension Points are used in the Logistical Network the start of turn after the turn they have been produced.

Note also that Extension Points are not cumulative and constructing another Supply Base at the selected Hex above (1) will not increase the range of the Truck Logistical Points coming from the City any further.

4.5.5. REALLY IMPROVING YOUR LOGISTICAL NETWORK

The Supply Bases discussed above are cheap and quick to construct but are really only good to give you a little bit more range. Take for example the road from the previous section far west beyond the Supply Base (named "Sulphur") we constructed.

If you need a lot more range, you will need to take more structural measures. The most effective way to get some real increase in Logistical Network



on our "far away from the City" border here would be to construct a new Truck Station.

This takes some effort, but once this construction is completed the effect is big. As we can see below:

The new Truck Station (named "Baracha") now causes 1,000 Truck Logistical Points to be spread out from its Hex in a 100 Truck AP Range. There are now 580 Logistical Points at start of turn between Baracha Hex and Sulphur Hex. Before the construction of the new Truck Station there were only 80 Logistical Points on that trajectory.

Furthermore, when our empire spreads further west we can repeat the same trick with placing a Supply Base once more to further extend the range of the Truck Station.



4.5.6. PRIVATE AND PUBLIC TRUCK LOGISTICS ASSETS

You might have noticed that the Truck Station in Bachara (a Public Asset) gives more Logistical Points and AP Range than the Transport Hub in our City (a Private Asset).



Above you can clearly see how superior the Truck Station is, but at the quid pro quo that you'll have to provide some Workers and Fuel.

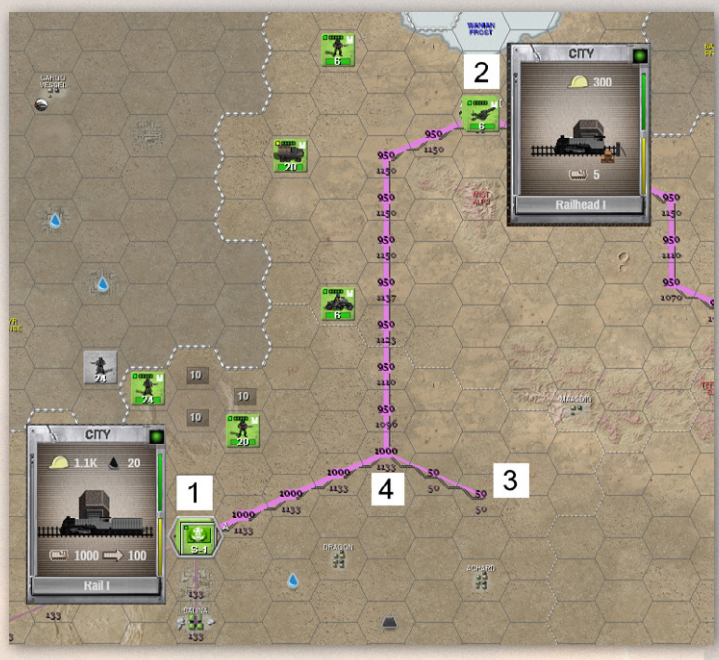
It is possible to "Nationalize" the Private Transport Hub and turn it into a Public Truck Station at the cost of some Credits and Population Happiness. This is something you should seriously consider doing to quickly double the range of your Truck Logistical Points as well as to more than double their quantity.

You can Nationalize a Private Asset by going to the Assets Tab, selecting the Asset and then clicking on the "Nationalize" button to the left.

4.5.7. RAILROADS

It is possible to upgrade Truck Stations to higher levels to get many more Logistical Points. However, the range of those higher levels will stay more or less the same. If your empire grows really big it is of course possible to build a long chain of Truck Stations, but Railroads might be more effective as the range of Rail Stations allows Rail Logistical Points to be spread much, much further than those Truck Logistical Points ever can be.

Above we see a City in the bottom (1) that has a Railroad going up north to another City (2). There is also a small branch splitting off halfway between them (3).



Note that the City in the bottom (1) has a Rail Station Asset present that is generating a 1,000 Rail Logistical Points and these get "spread-out" during the generation of your Logistical Network over all the Railroad Hexes.

Note that if we were considering Trucks, the Logistical Points would have divided 500 : 500 at the split in the road (4). However, to properly function, Railroads need to have a beginning and an ending. Rail Station Assets provide this function, as do Rail Head Assets (2). If there is no ending on a certain Railroad only 10% of the Rail Logistical Points will be allowed to be "spread out" over that Railroad, as it the case with our little branch (3).

4.5.8. ASSETS AND YOUR LOGISTICAL NETWORK

You should be aware of the rule that Public Assets (although they do not consume Logistical Points) need a road connection to their City that has at least a 100 Logistical Points per Asset level. Private Assets need only half that.

4.5.9. OPERATIONAL LOGISTICS



Assets and Zones need to have a direct Logistical Network connection to their Hexes, but Units are more flexible, and they'll pick up their Supply Items (like Food) at a road Hex that can be several Hexes away. The Units thus have a certain range around them in which they can pick-up stuff from road Hexes that actually have Logistical Points on them. This ability of the Units is their Operational Logistics ability.

Switching on the Used Logistical Points Layer, as well as the Show Operational Logistics Layer, will help you understand the Units' Operational Logistics ranges.

Note that your regular Logistical Point usage is shown as solid lines and Operational Logistics usage is shown as dotted lines.

1 Remember "Sulphur" Supply Base? It is on a road directly leading to the City with the SHQ. All Hexes on the road have Logistical Points on them. In the image above that are the white lines. All these Hexes connected by the white lines can serve as pick-up points for Units that are off the road-grid.

2 The off-road infantry Unit here for example has been picking up Supply Items 4 Hexes to the north-west. It is still in ideal Operational Logistics range as is shown by the dotted green line.

3 The off-road motorized Unit has also been picking up Supply Items, but this time 6 Hexes to the north-west. It is well beyond ideal Operational Logistics range, but it is still within the maximum Operational Logistics range. It will have been partially supplied.

Due to the fact that we activated the Operational Logistics Layer, we can see the range for ideal Operational Logistics (green Hexes) and the range for maximum Operational Logistics (yellow, blue and red). These colours give a preview for the Operational Logistics of the Units (if it does not move) at the start of the next turn.

Due to the fact that we activated the Used Logistical Points Layer, we see all the line where regular Logistical Points or Operational Logistical Points were used. Note that the Operational Logistical Points are coloured. A green dotted line to a Hex means that a Unit was there at the start of turn and that it was within ideal Operational Logistical Range. The yellow, blue and red dotted lines show Hexes where Units were present at start of turn that were still within maximum Operational Logistical Range.

5. THE RULES

This is a lengthy part of the manual. It goes over all the rules that are used in *Shadow Empire*. Except the first section, which provides a good overview of all the concepts and playing pieces in the game, I advise that players use this chapter as a reference as opposed to read it from start to end.

5.1. CONCEPTS

Before we start going into detail, let's give you a rough overview of some concepts and the stuff you'll be confronted with when you first fire up the game.

5.1.9.1. ADVISORS

You can only have a limited number of Leaders that have the prestigious Advisor position. They are special, as you can attach them to any other Leader, including Zone Governors and OHQ Commanders. When attached, an Advisor will also do any Skill Roll that the Leader he is attached to is doing and if he or she has a higher roll, that roll will be used instead.

5.1.9.2. ALIEN LIFEFORMS

In the current version of *Shadow Empire,* you probably will not encounter any alien civilizations. However, there might be some primitive alien life present on some Planets. Presence of alien lifeforms can have biohazard repercussions for unprotected humans and Open Terran Farming. Farming alien crops might be an option if any are available and they are in fact compatible with the human digestive system.

5.1.9.3. ATMOSPHERE

Your Planet will have a unique atmosphere. The composition of the atmosphere matters for a variety of reasons. The most important characteristic of an atmosphere is if it is breathable by humans and if it supports Open Farming.

5.1.9.4. BUREAUCRATIC POINTS (BP)

These are generated by some of your more governmentally-oriented Assets, notably Offices Assets. You can disperse these BP over your Organizations

by setting the National Budget. Call your Secretary if you want to discuss it. Inside the Organizations, they can be used to Research, make Stratagems and be put to good use on a big number of other Tasks.

5.1.9.5. CABINET

This is the operational day-to-day team that governs your Regime and that makes Decisions with you. It is composed of all the Council Directors, all SHQ Commanders and all Advisors you have in your service. All members of this "high management team" can weigh in on any Decisions. It is considered prestigious among Leaders to be on the board of the Cabinet.

5.1.9.6. CASUALTIES

Military casualties have an impact on the Zone where the Soldiers come from. People there are losing fathers, sons and other family members. Although some military losses are expected by the Population at a certain level of casualties, people will eventually feel the sacrifice in life is becoming too great and it will reduce Happiness and Loyalty. Note that the Fist Profile opens up the road to Regime Feats that can increase the casualty tolerance of your Populace.

5.1.9.7. CLIMATE

Your Planet will have a unique climate. Temperature and rainfall are particularly key characteristics of your Planet. They'll determine how valuable Water will be and if non-Domed Farming is possible.

5.1.9.8. COMMANDERS

Each SHQ and OHQ should ideally have a Leader assigned as its Commanders. SHQ Commanders give a boost to Morale growth and OHQ Commanders give a boost to Experience growth by training.

5.1.9.9. CREDITS (CR)

This is the monetary unit used in *Shadow Empire*. It is actually Liquid Energy kept inside a metallic container in the form of a coin or (with larger denominations) a bar. It also includes derivatives and paper money claims on Liquid Energy. The game abstracts all this for you and a Credit is just a Credit as far as you are concerned. The amount of Credits in circulation

varies due to inflation or deflation and scavenging. You use Credits to pay Leaders, Workers, recruit Soldiers and Colonists, to trade and do Diplomacy.

5.1.9.10. CULTURE

The Population of every zone belongs to a specific Culture. A people can have specific traits like a higher birth rate. Furthermore, Militia Units of specific peoples will have special Troops that are otherwise not available to you.

5.1.9.11. DECISIONS

Among the reports you'll find on your desk will be Decisions. Here there will be an issue presented to you and you'll have to make a choice. These choices will very often have an impact on your Regime Profile and your Relation with your Leaders. Your Cabinet members and other involved Leaders will often give you advice on the decision to take. It will be hard to always do the right thing. It is not obligatory to make a Decision, if you don't, the Decision will be made by one of your underlings (often, but not always your Secretary).

5.1.9.12. DIRECTORS

Each Organization should ideally have a Leader assigned as its Director. Directors enable Organizations to do their Tasks faster or better.

5.1.9.13. DISCOVERY

Before your Organizations are able to research, operationalize or design they need to have a basic idea what to work on. These ideas you get by setting the same Organizations to work on discovering ideas. Once an idea is discovered you can actually work on getting it into practical use. Discovery has a big random element in it, so the choices of what you can research, operationalize or design will vary from game to game.

5.1.9.14. EXPOSURE

There might be many hostile factors on your Planet. Cold temperatures, Radiation, a Toxic atmosphere or Biohazards. People and especially Troops who venture outside can be protected against these. A number of options are available to equip your Troops with either the bare minimum or less, or once researched, high grade pressurized personal armor.

5.1.9.15. FREE FOLK

Not everybody wants to be seen. The Free Folk are those people who stay mostly under your line of sight. They roam in uninhabited areas or they hide from you. Remember that a Hex is a large place (200km). Free Folk are migratory by nature and do not care much about Zone boundaries. If you are running a Zone properly and your Population is happy, Free Folk will be tempted to migrate to that Zone's City and join your Population.

5.1.9.16. FORMATION TYPES

Formation Types can be operationalized by your Staff Council. Once you have done that, you can use the Formation Type to deploy Troops in the field. There are two Formation Types: Formations (multi-unit with their own Operational HQ (OHQ)) and Independent Units. The latter kind does not bring much other advantage except being able to deploy a certain kind of troop mix. The former allows a Leader to take charge of the Formation and also Posture Stratagems to be played on it. Most OHQ Formation Types also allow you to assign one or more Independent Units to them as Auxiliary Units. The Auxiliary Units will then also benefit from the Leader's skills and any Posture the Formation has been set to.

5.1.9.17. GOVERNORS

You can and should appoint a Governor to each Zone that you control. Governors ensure that production in Public Assets runs much more efficiently. A Governor also allows you to Call the Governor and to discuss specific Zone Orders for him/her.

5.1.9.18. HUNGER

Everybody needs Food, and so do your Population, your Workers and your Soldiers. If not enough Food is available, they'll start starving and eventually dying or deserting you. Whatever you do, always make sure there is enough Food available for your Workers, Soldiers, Recruits, Colonists and, if you feel like it, your Population. But in order to feed your Population, you have to tell your Governor to allow Emergency Food to be given.

5.1.9.19. LANDSCAPE TYPES

Each Hex can have a different Landscape Type. These Landscape Types can have effects on economic productivity and Unit movement and combat rules.

5.1.9.20. LEADERS

You are the supreme leader of your Regime, but you have many Leaders at your disposal to help you run things smoothly. Leaders can be assigned as Zone Governors, SHQ or OHQ Commanders, Organization Directors and as Advisors. In almost all cases, the absence of a Leader and a vacant Leader slot (for Zones, HQs and Organizations) will cause you to lose at least some efficiency.

5.1.9.21. LEADER RELATION

The Relation score you have with a Leader is extremely important. For the strength of the bonuses given by Leaders, but also for their Skill Rolls that are modified by their Relation score.

5.1.9.22. LEADER SKILLS

Leaders can have Skills. It is these Skills that are used in a variety of Skill Rolls ranging from recovering Morale in Units to trying to fix combat Unrest in a Zone.

5.1.9.23. LOCAL TIME VS EARTH TIME

Every Round is 2 Earth Months.

Earth Years are not necessarily equal to Local Years.

Age of your Leaders is presented in Earth Years (it is really easier to interpret that way).

5.1.9.24. LOGISTICAL NETWORK

Logistics means the transport of items from one place to another. Your Logistical Network strength is the measure in which you are able to do that transporting. Your Logistical Network is a name for the totality of all the Logistical Points present on your Roads and Rail. The Logistical Points are generated by Assets like Truck and Rail Stations. The Logistical Points are, for example, used when the SHQ sends Items to Zones or supplies Units.

5.1.9.25. MAJOR REGIMES

There are two kinds of enemy Regimes, Minors and Majors. Majors are just like your Regime. They are rivals in the race for planetary conquest. There is a plethora of diplomatic and secret service Stratagems that you can use on Major Regimes.

5.1.9.26. MILITIA TROOPS

Upon start of the default game, all your forces are Militia forces. You control the movements of Militia Units but otherwise they function mostly autonomously. They take care of their own Replacement Troops and Supply. Militias are Zone-based and their growth depends on the Militancy score of their Zone. Their Zone Militia will also deliver Supply Items and possible Replacement Troops to your SHQ. The power of a Militia is rooted in the Zone Militancy score.

5.1.9.27. MINOR REGIMES

There are two main kinds of enemy Regimes. Minors and Majors. Minors resemble a rather undeveloped Regime. Minors have no control over their economy, have no Organization, only a supreme leader and their forces work like your Militia. Minors can be convinced to become a "client state" or even to willingly merge with you.

5.1.9.28. MINING

Chances are your Planet will have at least some mineral Deposits. It is possible to find and mine the following Deposits: Metals, Rare Metals, Radioactives, Water and Oil (Fuel).

5.1.9.29. MODELS

Models can be designed by your Design Council. A Light Tank or an Artillery Gun are examples of a Model. You need to design a Model (consider it making a prototype) before you can start producing it. Usually there are several design choices you can make once you order a new Model to be designed. You can also upgrade existing Models to perfect them, or to add new Techs into the design.

5.1.9.30. OPERATIONAL HQ (OHQ)

The Operational HQ is the lowest type of HQ. You can have an unlimited number of them and their purpose is to coordinate the efforts of frontline Units attached to them. OHQs always belong to and come with a Formation Type. A notable feature of an OHQ is the option to play Posture Stratagems on their Formations to give serious bonuses to the subordinate frontline Units. OHQs need to be assigned to a SHQ. OHQs need a Leader to be the Commander.

5.1.9.31. OPERATIONAL LOGISTICS

Logistical Points are only present on Road and Rail Hexes. Your Units however will often fight several Hexes away from those Roads or Railways. That is why all regular Units have a measure of Operational Logistical Range that allows them to pick up any needed supplies at the closest Road or Rail Hex.

5.1.9.32. ORGANIZATION

Organizations represent the government apparatus of your Regime. Your Zones will produce a certain number of BP (Bureaucratic Points) that can be assigned to your Organizations. With these BPs, the Organizations can perform a myriad of different Tasks, notably Research and production of Stratagems. Organizations need a Leader to be assigned as the Director of the Council in question.

5.1.9.33. PLANET

You will take charge of a Regime on one of the thousands of worlds once belonging to the Galactic Republic. Obviously, there is great diversity between all the Planets. When you start a new game, you will be able to select what kind of Planet you will want to play on. There are many planetary statistics that will impact your game, like the shape of the planetary surface, mineral Deposits and the presence of ice, water and life.

5.1.9.34. POLITICAL POINTS (PP)

This is the most vital resource you have. It is used to play Stratagems, make personnel changes, upgrade Cities, raise new Units and HQs. You will have more PP if you get more powerful, but your PP will always be highly limited. Be sure not to suffer Prestige Damage, as this can seriously reduce your PP income.

5.1.9.35. POPULARITY

This a Regime-wide score based on many Zone, Leader and Unit statistics. It helps you to avoid Unrest events even in Zones were conditions are miserable.

5.1.9.36. POPULACE

Is the sum of your Population and Workers in a certain Zone.

5.1.9.37. POPULATION

Most Zones have people who try to stay alive, grow Food, trade and raise kids. They tend to stay close together in the Zone City or in smaller communities around your Assets. Where they live exactly is abstracted. For all intents and purposes, assume them to all be in the City Zone. Normally Populations are quite docile, and they'll pay their due in exchange for your protection. Population otherwise takes care of itself. They construct their own Private Assets and keep their own Food and Credits reserves. Population can melt away and become Free Folk if they are unhappy or are starving. Likewise, if your Zone seems a good place to live, Free Folk might leave the wastelands and join your Population.

5.1.9.38. POSTURES

This is a specific category of Stratagems that is called Posture Stratagems. They allow you to assign a posture to an OHQ. These can give big and potentially decisive bonuses to your armies.

5.1.9.39. PRIVATE ASSETS

These are Assets that you did not order built yourself. It is the Population who constructed them and who works in them. Most of the benefice stays with them, but part is your due. You can increase that due by increasing Income and Sales Tax.

5.1.9.40. PROFILES AND REGIME FEATS

Each Regime has a Profile consisting on a large number of interlocking Profile fields. If you have a high score on a certain Profile it will give you the chance to acquire specific Regime Feats that can, for example, increase your production, chance of making peace or improve your military recruitment.

5.1.9.41. PRESTIGE DAMAGE

Can be suffered by declaring war on neighbours that you have good Relation with or even some sort of deals in place with. If present, it causes a decrease in PP Income.

5.1.9.42. PUBLIC ASSETS

You can use your Workers to construct a large variety of different Assets that will be under your direct control. Most Public Assets just need Workers

present to maintain the Asset. You can choose to reduce production or close or mothball a Public Asset.

5.1.9.43. REGIME

Is the principal political and territorial entity ruled by a human player or an AI Leader. There are different types of Regimes out there. Notably: Major Regimes (like the Regime you are playing), Minor Regimes, Rebel Regimes and the Unaligned Forces Regime.

5.1.9.44. REGIME BONUSES

Regime Feats can provide Regime Bonuses. These Regime Bonuses range from producing more Items to being able to recruit better Leaders. There are also a number of Assets that produce Regime Bonus Points, which will be turned into Regime Bonuses as well.

5.1.9.45. REGIME LEVELS

Each Regime has 3 key levels: Tech Level, Admin Level and Civilization Level. These levels, together with the City level of a Zone, limit the maximum levels of your Assets.

5.1.9.46. REGULAR TROOPS

As opposed to Militia, these are Troops that are directly recruited and operated by you. These Troops require you to feed and supply them. Regular Troops are more interesting since you can determine their Models and their Formation Type, and they can use an OHQ when included in a multi-Unit Formation Type.

5.1.9.47. REPLACEMENT TROOPS

All Units except SHQs have an ideal table of organization and equipment (TOE). The part that is missing can be sent from an SHQ as Replacement Troops. The reverse can be the case as well if for example you change the Formation Type.

5.1.9.48. REPORTS

You are the supreme leader of your Regime. Basically, you can picture yourself as a semi-tyrant (even if you allow some democracy, it is not as if you can be voted out of office). Every turn a lot of reports will show up on

your desk. Most of them will be overviews and some of them will be boring. Don't worry: you do not need to read everything. Some of these papers on your desk will actually require a Decision from you.

5.1.9.49. RESEARCH

A number of Organizations can do research-like Tasks. Some for Techs (proper research), others for Formation Types (called operationalization) and Models (called design). However, before you can research (or operationalize or design) something you need to have Discovered the idea first.

5.1.9.50. ROADS AND RAILROADS

Each Hex can have a Road or Railroad moving to another Hex in up to 6 directions (as is to be expected with hexagons). Having a Road and Rail Network is crucial to connecting Zones and Units to their SHQs. Dirt Roads will be constructed when you construct an Asset. Roads (and Railroads) can be manually constructed as well using the Construct Road Order Mode.

5.1.9.51. SCAVENGING

Your Planet probably supported a lot more people before the Dissolution War than the current headcount. This means loads of Ruins can still be scavenged for scrap Metal and Food. Keep in mind that at some point you can completely pick clean a Ruins Hex and further scavenging will become impossible. If you have been unable to find Metal Deposits the construction of Scavenging Assets like Recycling Facility is a good idea.

5.1.9.52. SEASONS

Depending of the kind of Planet, you will almost always have some kind of Seasons. This means there will be Winter and Summer with the relevant change of temperatures. If you are on an inhospitable Planet, this might not mean much to you as everybody is already wearing Environmental Suits and doing their farming inside Domes.

5.1.9.53. STRATAGEMS

You'll have a limited number of Stratagems available. At a cost of spending PP (Political Points) or FP (Fate Points) you can play one or more of these Stratagems. Stratagems can impact Units, Leaders, Zones and other Regimes.

5.1.9.54. STRATEGIC HQ (SHQ)

The Strategic HQ is the highest type of HQ. You can only have a limited number of them due to the increasing strain they'll put on your PP income. They form the backbone of your Logistical Network as they act as Item inventories, receiving Items from production centres and sending them to Zones or Units in need of Items. Zones and OHQs need to be assigned to a SHQ. SHQs need a Leader to be the SHQ Commander.

5.1.9.55. TASKS

Each Organization can perform a number of Tasks, usually at least two but can be much more. To determine how much effort is put in each Task, you are able to set the Organization Budget. You can force this Decision by calling the Director of a specific Council and asking him/her to discuss it.

5.1.9.56. TECHS

Techs are technologies or concepts that you can research at some of your Organizations. There are two kinds of Techs: Linear and Binary ones. Linear Techs are easy to progress in initially but become harder to research once you become perfectionist. The positive effect of a Linear Tech is relative to your score on the Tech in question. Binary Techs require a fixed investment effort and are then finished. Binary Techs either are fully researched or they are not; only when fully researched do they give their positive effect.

5.1.9.57. TRADERS

Land-based Traders are intermingled with the Private Economy, though they'll also mingle with the Free folk. They are outside your control. However, you can buy or sell Items from them and impose taxes on them. Also Diplomatics with Majors concerning trade can impact their operations.

5.1.9.58. UNITS

As opposed to HQs (OHQs and SHQs), these Units contain your actual combat Troops. They can be part of a Formation (multi-unit) or they can be Independent Units (directly under SHQ or attached as auxiliary Units to an OHQ).

5.1.9.59. WORKERS

You can hire Workers from your Population. Workers consume Food from your stocks. Depending on the wealth of the Private Economy you might need to pay them a small salary in order to stay in your service. They don't like it if they earn (much) less than they could earn in the Private Economy.

5.1.9.60. ZONE

Is a coherent administrative area consisting of a large number of Hexes. Each Zone has one City. Controlling that City means controlling the Zone. Zones need to be assigned to an SHQ. Zones need a Leader to be the Governor. It is possible to redraw the borders of Zones using the Borders Order Mode.

5.1.9.61. ZONE CITY LEVEL

Not all Zones have a City. If this is the case with one of your Zones, you'll need to found a City if you want to settle Colonists. If you found a new Zone it will start with City Level I. In order to upgrade your City to a higher level, you'll need to have a minimum amount of Population and Workers. The City Level determines in part the highest level your Assets can have.

5.1.9.62. ZONE CIVILISATION AND QOL SCORE

Represents how cultured and civilised (and probably decadent) your Population and Workers are in this Zone. Civilisation can rise up to the Quality of Life (QOL) Score of a Zone. The higher the Civilisation Score, the lower the Fertility Rate. The average of all Zone Civilisation Scores determines the Regime Civilisation Level.

5.2. PLANETARY

Let's take a look at rules that are Planet or Hex centred.

5.2.1. PLANET STATS

Each Planet will confront you with different conditions and different maps and terrains. Let's look a bit closer at a number of Planet Stats. You'll mostly be interested in these when you are generating a Planet when you are starting a new game. But you'll also want to double check them when you are for example wondering if you should equip your Troops with an Envirosuit or when asking yourself which kind of Farm to build.

5.2.1.1. STARS SPECTRAL CLASS

The Spectral Class determines the colour and Luminosity of the star our Planet is orbiting around. Keep in mind that bright stars like the A and F ranges have short life spans. Hence there will be less chance for life to develop on Planets orbiting those. The reverse is true in respect of K and M range stars, which are often of venerable age.

5.2.1.2. ORBITAL DISTANCE FROM STAR

An orbit too close to the Star will render the Planet too hot and an orbit too far from the Star will render the Planet too cold. The exact distances of close and far, and especially the so-called "Goldilocks Zone" of orbital bandwidth providing good planetary temperatures for Terran life, depend on the Luminosity of the Star. The distance to the Star is measured in Astronomical Units (AU). 1 AU is the distance between Earth and the Sun.

5.2.1.3. TEMPERATURE

The average temperature of the Planet gives you a good indication of the climate the Planet will have. As a reference: The average temperature of Earth is 15 degrees Celsius. Planets close or below zero tend to have major glaciers, if they have water presence.

5.2.1.4. GRAVITY & PLANETARY RADIUS

Gravity is useful to stay attached to the planetary surface when taking a stroll. But even more important good gravity will make sure the Planet does

not lose its atmosphere. Usually higher gravity means a denser atmosphere. As a reference: Earth gravity is 1. Mars gravity is 0.37 and this low number caused it to lose plenty of gases with high escape velocities to outer space.

Gravity is directly linked to Planetary Radius and Planetary Density. The more Mass the Planet has, the more Gravity it exerts.

5.2.1.5. PLANET AGE

A young Planet will be more geologically active and have more tectonic activity and mountains. An old Planet, especially a very old Planet, will be geologically dead and have fading mountain ranges. So younger Planets might seem to be more interesting. However, with regards to life, the older the Planet the more chance for it to emerge and evolve.

5.2.1.6. TILT

If the Planet is spinning around an axis that is at an angle it has a Tilt. This is what causes Seasons. As a reference: Earth's Tilt is at 23.5 degrees. The more Tilt, the greater the seasonal differences.

5.2.1.7. ECCENTRICITY OF ORBIT

If the Planet has an eccentric orbit around its Sun this will create greater seasonal differences. As a reference: Earth has almost no eccentricity and is almost perfectly circular.

5.2.1.8. SPEED OF ORBIT

This determines the length of the seasons. As a reference: Earth takes 356 days to complete an orbit and in game terms would have 6 seasons. You can generate Planets with from one to eight seasons.

5.2.1.9. SPIN

Basically, this impacts the length of a day. This is nice to know for setting an alarm clock for the inhabitants of the Planet, but for us it is only important because it has an impact on Wind Speeds. The quicker the Planet spins the higher the Wind Speeds will be. And Wind Speeds help determine how far water vapour can travel from the seas into the continents.

5.2.1.10. AIR PRESSURE

A thick atmosphere gives more even temperature distribution as well as higher Wind Speeds. Furthermore, higher air pressure gives more chance for life to emerge and evolve.

5.2.1.11. WIND SPEEDS

Wind speed has an impact on rainfall and temperature distribution. The higher the wind speeds, the further for example rain will fall from any seas the Planet possesses. Wind direction changes with the Seasons and it is possible for certain Zones to have plenty of rainfall in one season, but little in another.

5.2.1.12. RAINFALL

This is a very crucial statistic. Without rainfall the lifeforms and plants using Water as a Solvent will have a very hard time to emerge and evolve. Look for example at Mars… no rainfall… no life. High rainfall will also cause Rivers to form.

5.2.1.13. SEA OR LAKE SURFACE

Planets can have large open bodies of Water. This parameter will relate the percentage of Planet surface that is lakes and seas. Especially for life using Water as a Solvent the presence of bodies of Water will be crucial for its evolutionary progress.

5.2.1.14. SEASONS

An overview of the seasons is given here. Note that you only play on a part of the Planet. The longitudes above 66 degrees are not part of the map to prevent major distortion issues with the rectangular hexagonal grid that the game uses. This is one of the few compromises made design-wise. The top of the map is referred to as "Arctic" and the bottom of the map is referred to as "Antarctic".

Keep in mind that big seasonal shifts in temperature might play havoc on any plans you might have of doing Open Farming (as opposed to Domed Farming) on this Planet.

5.2.1.15. ATMOSPHERIC COMPOSITION

Many kinds of gasses can be present here. The presence or absence of them might make it impossible for Humans to breath in this atmosphere, or Open Farming to take place.

Some gasses can be extracted and turned into fuel at higher technology levels.

5.2.1.16. RESPIRATORY HAZARD LEVEL (RHL)

Can Humans breathe in this atmosphere?

LEVEL	DESCRIPTION
0	Perfect atmosphere for humans.
1	Imperfect. Filters needed to breathe.
2	Insufficient. Envirosuit advised. Filters probably won't cut it.
3	Toxic. Envirosuit necessary.
4	Insidious. Instant death without Envirosuit.

5.2.1.17. BIOLOGICAL HAZARD LEVEL (BHL)

Do the Alien Lifeforms on this Planet pose any threat to Terran organisms and Humans?

LEVEL	DESCRIPTION
0	No threat whatsoever to humans.
1	Irritant. Filters suffice to keep alien microbial life at bay.
2	Hostile. Envirosuit advised. Filters probably won't cut it.
3	Aggressive. Envirosuit necessary.
4	Extreme. Instant death without Envirosuit.

5.2.1.18. TERRESTRIAL ATMOSPHERIC AGRICULTURAL TOXICITY LEVEL (TAATL)

Do Terran Plants grow when planted outside your domes or are there gasses toxic to it present in the atmosphere?

LEVEL	DESCRIPTION
0	None. Perfect atmosphere for Terran Plants.
1	Minor insufficiencies. Slightly reduced growth.
2	Medium insufficiencies. Reduced growth.
3	Major insufficiencies. Much reduced growth.
4	Incompatible. Terran Plants will die when exposed to this atmosphere.

5.2.1.19. ALIEN NUTRITIONAL TOXICITY LEVEL (ANTL)

On some Planets it might be more tempting to farm alien plants instead of Terran ones. However, not all alien plants (and animals) can be digested by Humans.

LEVEL	DESCRIPTION
0	Excellent for humans. You can eat and digest the alien Plants on this world!
1	Minor toxins or minor molecular incompatibilities. Slightly reduced nutritional value.
2	Some toxins or some molecular incompatibilities. Reduced nutritional value.
3	Serious Toxins or molecular incompatibilities. Low nutritional value.
4	Toxic or incompatible. Terran plants will die when exposed to this atmosphere.

5.2.1.20. VEGETATION LEVEL

If Alien Lifeforms are present the most impactful life on the map is the Plant life.

LEVEL	DESCRIPTION
0	Nothing visible. Maybe there are bacteria, but usually nothing visible.
1	Grass or Moss. Very small plants. We are talking up to 10 or 20 centimetres here. Nothing to provide cover, but it does liven up the scenery!
2	Shrubs or Bush. Plants up to several meters. Maybe even 5 or 10 meters! Allows for Savannah and Forests.
3	Trees that can grow dozens of meters high. Allows for Forests, Heavy Forest and Jungle.
4	So-called "Atlantean Level". Trees that can reach up to hundreds of meters high. Allows for all Forest types as well as Cloud Forests.

5.2.2. TERRAIN

What kind of terrain, Landscape Type, Rivers and obstacles can you find on your Planet?

And how do they impact you?

5.2.2.1. LANDSCAPE MOVEMENT COSTS

The following list shows the Action Point costs for the different kinds of Movement Types for the different kinds of Landscape Types.

LANDSCAPE	FOOT	ARTILLERY	WHEEL	TRACKED	WALKER
Sand Plains	25	50	30	15	20
Sand Dunes	30	55	50	50	30
Clay Plains Grassy Plains Rocky Plains	25	50	15	10	15
Low Mountains	40	65	50	40	40
High Mountains	60	70	9999	9999	60
Forested Low Mountains	50	70	60	50	50
Marshes	35	60	60	80	80
Tundra	30	55	30	30	30
Savannah	25	50	15	10	15
Forests	25	50	20	20	20
Heavy Forest	30	55	30	30	30
Jungle	35	60	40	40	40
Cloud Forest	40	65	50	50	50
Ruins	25	50	15	10	15
Agricultural	25	50	15	10	15
Snow Variant	+5 / +10	+5 / +10	+10 / +20	+5 / +10	+5/ +10
Glacier	30	55	30	20	25

5.2.2.2. RIVER EXTRA MOVEMENT COSTS

Crossing a River costs extra Action Points.

If there is a Road over a River this implies a bridge and these extra costs do not apply.

RIVER	FOOT + ARTILLERY	WHEEL	TRACKED	WALKER
Small River	+5	+10	+10	-
Medium River	+10	+20	+20	-
Large River	+15	+30	+30	+15
XL River	+20	+40	+40	+20
Frozen Rivers	No effect	No effect	No effect	No effect

5.2.2.3. ESCARPMENTS AND CANYONS MOVEMENT COSTS

Moving up an Escarpment or traversing a Canyon costs extra Action Points. If there is a Road over these obstacles the extra cost does not apply.

OBSTACLE	FOOT +ARTILLERY	WHEEL	TRACKED	WALKER
Escarpment (upwards only)	+20	+30	+30	+30
Entering a Glacier Hex from a non-Glacier Hex	+20	+30	+30	+30
Canyon	+30	+40	+40	+40

5.2.2.4. ROAD MOVEMENT COSTS

If a Road leads from one Hex to another, the movement cost for the Road instead of any Landscape Type, River Type or Escarpment and Canyon is used.

ROAD	LOGISTICAL TRUCK	LOGISTICAL TRAIN	FOOT	ARTILLERY	WHEEL	TRACKED	WALKER
Dirt Road	10	9999	25	50	10	10	15
Sealed Road	5	9999	25	50	8	10	15
Rail	9999	2	25	50	20	20	20

5.2.2.5. ROAD CONSTRUCTION COSTS

The AP Costs for constructing a Road is calculated with the Road Construction Movement Type. Dirt Road construction costs 20 IP per 10AP. Sealed Road construction costs 50 IP per 10AP. Constructing a Sealed Road over a Dirt Road gives you a -40% reduction on costs.

The Road construction costs in IP per Hex are:

LANDCAPE / RIVER / RIDGE	AP
Regular	10
Glacier	30
Low Mountain	40
Forested Mountain	50
High Mountain	60
Ridge	20
River	10-40
Canyon	40
Swamp	20

5.2.2.6. LANDSCAPE TYPE HIDE SCORES

Different Landscape Types provide different Hide Points for the Troops present.

LANDSCAPE TYPE	HIDE SCORE
Sand Plains	0
Plains	0
Rocky Plains	0
Low Mountains	30
High Mountains	50
Marshes	0
Forests	30
Heavy Forest	40
Rain Forest	50
Cloud Forest	60
Forested Low Mountains	40
Tundra	0
Glacier	0
Savannah	10
Ruins	20
Agricultural	0

5.2.2.7. LANDSCAPE TYPE ENTRENCHMENT

Different Landscape Types provide different maximum and automatic Entrenchment points to your Troops.

LANDSCAPE TYPE	INF + GUNS MAX ENTRENCH	INF + GUNS AUTO ENTRENCH	WALKERS MAX ENTRENCH	WALKERS AUTO ENTRENCH
Sand Plains	50	0	25	0
Plains	75	0	37	0
Rocky Plains	100	25	50	0
Low Mountains	200	100	100	25
High Mountains	250	125	125	37
Marshes	50	0	25	0
Forests	150	50	75	0
Heavy Forest	200	100	100	25
Rain Forest	200	100	100	25
Cloud Forest	200	100	100	25
Forested Low Mountains	250	150	125	50
Tundra	50	0	25	0
Glacier	0	0	0	0
Savannah	125	37	62	18
Ruins	250	125	125	50
Agricultural	125	50	25	0

5.2.2.8. LANDSCAPE TYPE COMBAT MODIFIERS

Especially armored (or Panzer if you like) and motorized forces can run into difficulties in some Landscape Types.

LANDSCAPE	GUNS ATT MOD	GUNS DEF MOD	MOT/PZ ATT MOD	MOT/PZ DEF MOD
Sand Plains			-60%	-40%
Clay Plains Grassy Plains				
Rocky Plains				
Low Mountains (grassy)	-25%		-50%	-25%
High Mountains (grassy)	-50%		-75%	-50%
Marshes (grassy)			-50%	-50%
Forests			-50%	-25%
Heavy Forest			-70%	-40%
Rain Forest			-80%	-55%
Cloud Forest			-90%	-70%
Forested Low Mountains	-25%		-75%	-50%
Tundra				
Glacier				
Savannah			-25%	-10%
Ruins	-50%		-50%	-25%
Agricultural			-25%	-10%

5.2.2.9. RIVER COMBAT MODIFIERS

Rivers can be difficult to cross en-masse and reduce offensive effectiveness.

RIVER TYPE	INF ATT	GUNS ATT	MOT/PZ ATT	WALKERS ATT
Small River	-15%	-15%	-20%	-
Medium River	-30%	-30%	-40%	-
Large River	-45%	-45%	-60%	-20%
XL River	-60%	-60%	-80%	-40%
Small Lava River	-43%	-43%	-46%	-33%
Medium Lava River	-53%	-53%	-60%	-33%
Large Lava River	-63%	-63%	-73%	-47%
XL Lava River	-75%	-75%	-82%	-65%

5.2.2.10. SEASONAL FREEZING

Rivers can freeze during winter.

5.2.2.11. OBSTACLE COMBAT MODIFIERS

Escarpments and especially Canyons can be difficult to assault "en masse". And reduce the offensive effectiveness.

RIVER TYPE	INF ATT	GUNS ATT	MOT/PZ ATT	WALKERS ATT
Escarpment (upwards)	-50%	-50%	-50%	-50%
Attacking into a Glacier Hex	-50%	-50%	-50%	-50%
Canyon	-75%	-75%	-75%	-75%

5.2.2.12. VOLCANOES

On some Planets you'll find active Volcanoes. These do not impact movement or combat, but at a certain technology level they provide you the option to construct an Asset to tap them for Energy.

5.2.3. ENVIRONMENTAL EXPOSURE

As discussed above, Planets can have troublesome atmospheres and, for example, deadly alien microbes. On top of this temperatures could be far below zero. Environmental exposure of your Troops and Populace can have significant consequences if they are not properly protected or situated in a Hex with buildings that can help protect them.

Make sure that the Exposure Levels does not get too high or your Troops will suffer Readiness, Morale penalties and could die.

5.2.3.1. EXPOSURE CALCULATION FOR YOUR UNITS

First of all, there is the temperature that is an exposure danger. There are two other exposure dangers of interest here: Respiratory Hazard and Biohazard. Their base levels correspond with the RHL and BHL statistics of the Planet.

The threat these exposure types pose to your Troops can be reduced based on your Troops' equipment and any possible buildings in their Hex. The two tables are cumulative.

TROOPS' EQUIPMENT	RHL MOD	BHL MOD	TEMP ADJUST	RAD MOD
Regular uniform	None	None	+10c	None
Filters	-1*	-1*	+10c	None
Thermosuit	None	None	+40c	None
Filters + Thermo	-1*	-1*	+40c	None
(padded) Envirosuit	-4	-4	+100c	-100 rad
Shield + Envirosuit	-4	-4	+100c	-100 rad
(adv) Combat Armor	-4	-4	+150c	-300 rad
(adv) Battledress	-4	-4	+273c	-500 rad
Vehicle	-4	-4	+273c	-500 rad
Radiation Filter Tech	None	None	None	-200 rad

* If base level is not 4.

PROTECTION BY BUILDINGS	RHL MOD	BHL MOD	TEMP ADJUST	RAD MOD
Active Asset	-4*	-4*	+273*	-400 rad*
Mothballed Asset	-2*	-2*	+50*	-400 rad*
Abandoned but intact location	-1*	-1*	+20*	-200 rad*
Radiation Treatment Center	None	None	None	-400 rad per 10K Populace**
Anti-Radiation Infrastructure	None	None	None	-800 rad per 20K Populace***
Radiation Filter Tech *	None	None	None	-200 rad*

* Lack of Upkeep and damage can modify result. Radiation Filter Tech needs Asset with Upkeep paid to function.

** Means that if you have more Populace/Soldiers using this Asset the effect will be diluted. Level 1 assets help 10K Populace, level 2 help 30K, level 3 help 60K, level 4 help 100K, level 5 help 150K, etc... Order of help given by this Asset Type is: Soldiers first, Workers/Recruits/Colonists after, Population last. These points are shared at Zone Level. Furthermore, this does not help diminish the initial effects of the strike

*** Means that if you have more Populace/Soldiers using this Asset the effect will be diluted. Level 1 assets help 20K Populace, level 2 help 60K, level 3 help 140K, level 4 help 300K, level 5 help 620K, level 6 1260K, level 7 2520K. Order of help given by this Asset Type is: Soldiers first, Workers/Recruits/Colonists after, Population last. These points are on a Hex-per-Hex basis.

5.2.3.2. EXPOSURE LEVEL EFFECTS ON YOUR UNITS

After the adjusted Exposure levels are calculated, the effects are the following:

EXPOSURE	DEATHS	READINESS	MORALE
RHL Level 1		Max 80	90% of Base Morale
RHL Level 2	0-5%	Max 60	80% of Base Morale
RHL Level 3	5-25%	Max 40	60% of Base Morale
RHL Level 4	25-50%	Max 20	30% of Base Morale
BHL Level 1		Max 80	90% of Base Morale
BHL Level 2	0-5%	Max 60	80% of Base Morale
BHL Level 3	5-25%	Max 40	60% of Base Morale
BHL Level 4	25-50%	Max 20	30% of Base Morale
Temperature <0		Max 90	90% of Base Morale
Temperature <-10		Max 80	80% of Base Morale
Temperature <-20	5%	Max 70	70% of Base Morale
Temperature <-30	10%	Max 60	60% of Base Morale
Temperature <-40	25%	Max 45	45% of Base Morale
Temperature <-50	50%	Max 30	30% of Base Morale
Temperature <-60	75%	Max 15	15% of Base Morale
Temperature <-70	100%	Max 0	0% of Base Morale
Rad>50 (lvl 1)		Max 90	90% of Base Morale
Rad>100 (lvl 2)		Max 80	80% of Base Morale
Rad>200(lvl 3)		Max 70	70% of Base Morale
Rad>400 (lvl 4)	5%	Max 60	60% of Base Morale
Rad>800 (lvl 5)	10%	Max 50	50% of Base Morale
Rad>1600(lvl 6)	20%	Max 40	40% of Base Morale
Rad>3200 (lvl 7)	35%	Max 30	30% of Base Morale
Rad>6400 (lvl 8)	55%	Max 20	20% of Base Morale
Rad>12800 (lvl 9)	80%	Max 10	10% of Base Morale

5.2.3.3. EXPOSURE CALCULATION FOR POPULACE

Your Population and Workers are subject to the same rules. Just keeping Upkeep for at least one building will keep them safe from RHL, BHL and temperature Exposure (as well as a lot of radiation).

The effects of Exposure in a Zone are applied on a weighted basis, if different Hexes have different Exposure levels. So if you have, for example, an outlying Mining Asset that is operational but in a radiated Hex only the Workers being employed in that Asset will be affected by that radiation.

Radiation is a real danger for your Populace. For each Radiation Level they'll suffer a Happiness Point loss and above level 3 your Populace will suffer casualties due to radiation sickness and burns.

Populace also suffers 2 Happiness Points per RHL, BHL level and each 10 degrees below zero that it is not protected from by modifiers above.

5.2.3.4. EXPOSURE RULES AND FREE FOLK

The Free Folk are never impacted by RHL, BHL and temperature Exposure. They are considered to have adapted habitats, genes, procedures and equipment. However, they are impacted by Radiation, but receive a -500 RAD modifier.

5.2.3.5. EXPOSURE RULES AND COLONISTS OR RECRUITS

Colonists and Recruits will be affected either as Soldiers when in SHQ or as Workers when in Zone.

5.3. ZONES

The Planet is divided in Zones. A Zone is a semi-coherent regional whole that has a single City as its administrative centre.

Although Zones without a City do exist, they are not functional without it. In the case of some Minors or non-Aligned Forces, Free Folk settlements can function as symbolical centres for Zones as well.

5.3.1. ZONE BORDERS

The Zone Borders form automatically upon Founding a new Zone or conquering a City. But you can change the Zone Borders by going into "Zone Borders" Order Mode.

ZONE BORDER EVENT	DURING START OF TURN CHECK-UP	DURING CONQUEST	DURING ZONE BORDER DRAWING MODE	DURING FOUNDING OF A NEW ZONE
Asset Hex change Zone	Becomes part of new Zone (But will be delegated to old Zone because this is considered an involuntary change)	Becomes part of new Zone (unless in construction)	Becomes part of new Zone	All Assets in City Hex of new Zone join New Zone.
Free Folk Hex change Zone	Moved to new Zone	Moved to new Zone	Moved to new Zone	All Hexes that join New Zone have their Free Folk moved to new Zone
Pop and Worker change Zone	Never, you have to use Colonists	Never, you have to use Colonists	Never, you have to use Colonists	Only Pop and Worker working in the Assets in the Hex that is the new City Hex are transferred the new Zone.

You can only change Zone of a Hex using the Order Mode Zone Borders if the Hex has at least 2 Hex neighbours of that same Zone or a City or an Asset of that Zone just next to it.

When a new Zone is founded, or a City is conquered, the newly acquired Zone takes Hexes as its territory up to a dividing line in the middle between it and its neighbouring Zones, but this can be limited as the New Zone will stop extending when it encounters an Asset of another Zone. Any exceptional case rule: Hexes that are cut-off from the old Zone also join the New Zone, but any Assets present there will be delegated to their Old Zone (as their Workers and Population are not moved).

5.3.1.1. AUTOMATIC HEX RE-ASSIGNMENT

The following rules apply when you conquer Hexes by moving Units in (or by successful combat):

- Any Hex conquered will become part of the Zone from which the conquest took place.
- Any Hex without a Zone assigned (or without a land connection through its own Zone to its City) will be assigned to the closest Zone.

5.3.2. CITY

The City is where most of your Populace live. There is only one City per Zone.

Founding a new Zone (and City) can be done by constructing an Asset outside the City with the flag "Found New City" flagged. Once the construction is finished the Asset will become a new City and a new Zone will form around it.

You can also choose an existing Rural Asset and give it the order to become a new City (and Zone) if there are at least 4 Hexes between it and any existing City. This rule is here to avoid City (and Zone) spam.

Founding a new City costs 5 PP either way. Note also that the necessary Workers and Population will switch from the old Zone to the new Zone.

5.3.3. ZONE STATS

A Zone has many kinds of statistics and properties which we'll discuss here. They can be roughly divided into administrative ones, logistical ones, socio-economic ones, special state ones and Worker-specific ones.

5.3.3.1. SOCIO-ECONOMIC STATS

This is the biggest category. We should start by explaining the exact differences and similarities between Workers and Population.

They are mostly similar; they live in the same kinds of streets and shop on the same markets. The difference is that Population minds its own business and makes its own living (using Private Assets) and Workers depend on you to feed and pay them, for which in exchange they work in your Public Assets. Almost all Stats here apply to both of them, except for Hunger and Happiness, which are measured separately.

City Level

The City Level is an indication of the City's infrastructure and administration. It does not limit Population, but it does limit the Level that Public Assets can reach.

Private Assets are not limited by City infrastructure and administration.

Without infrastructure you cannot organize complex things, and that is what higher Asset Levels signify.

Since you can only build one Asset of each kind on a Hex, and many Assets can only be built in a City, a low City Level will limit the level of Assets in it. Agricultural and Mining Assets are less limited by City Level as they usually have more Hexes where they may be constructed. It is possible to upgrade the City Level at significant PP cost.

Keep in mind that the City Level can drop if a Zone's Population drops below the relevant threshold. So, for example, a Minor City will downgrade to a Big Town if its Population drops below 50 K.

LEVEL	MINIMUM POPULACE TO UPGRADE TO THIS LEVEL	NAME	MAX PUBLIC ASSET LEVEL	PP COST TO UPGRADE TO THIS LEVEL
1	n/a	Village	1	n/a
2	25K	Small Town	2	5
3	50K	Big Town	3	10
4	100K	Minor City	4	20
5	200K	Major City	5	30
6	325K	Metropolis	6	40
7	550K	Ext. Metropolis	7	50

Populace

The total of your Population and Workers. In some calculations it is used, hence it is mentioned here.

Population

The people that live in your Zone and recognise your Regime as being the legitimate or defacto power. They mind their own business and work in the Private Economy.

Workers

These are also people that live in your Zone, they mingle with your Population, but they work directly for you. You feed them and often pay them as well. They work in the Public Economy.

You can recruit and fine-tune your workforce through calling your Zone Governor and discussing Zone Orders.

Population Happiness

It is better if people are happy as they will be more willing to be recruited as Workers. Low Happiness score might have all kinds of negative

consequences, ranging from negative Zone Events to the Population melting away into the wastelands to join the Free Folk.

Low Happiness will also slowly reduce Population Loyalty. High Happiness will increase Population Loyalty.

Loyalty

Loyalty impacts how willing the Population are to be recruited as military Recruits or Colonists.

It can also reduce Unrest if at sufficient level.

It also influences Cultural Adjustment of the Zones Culture to your Regimes Culture.

Furthermore, low Loyalty combined with low Happiness can trigger the nastiest Zone Events.

Worker Happiness

If Workers are unhappy, they'll leave your factories and rejoin the Population.

Worker Happiness also influences the recruitment success of new Workers.

Furthermore, low Worker Happiness might cause negative Zone Events.

Jobs

The number of jobs available in the Private and Public Economy is specified in the interface. This gives you an idea of if you have surplus or deficit Population and / or Workers.

Private Credits

This is an estimate of the amount of Credits held by your Population. Once it reaches a certain level, the Population will use it to expand their Private Economy. You can help that process by investment in the Private Economy through Zone Orders.

Private Food

This is an estimate the Food reserve of the Population. They'll consume it if there are Food shortages. They'll sell it on the market if it gets too big.

Hunger

This is tracked separately for Population and Workers. If the Hunger score gets too high people will start dying. Hunger also reduces Happiness, especially for Workers.

Workers and Population will try to avoid going Hungry by spending respectively Private Credits or Salary received.

Civilisation Score

This signifies the level of cultural and civilisation development of the Populace of the Zone. It goes up with time if it is lower than the Quality of Life Level. And it goes down with time if the reverse is true.

The higher the Civilisation Score, the quicker Unrest and Danger are reduced. However, the reverse is true for Fear.

Quality of Life (QOL) Score

This signifies the amount of security, facilities and luxuries available to your Zone's Populace. If Quality of Life is higher than the Civilisation Score, it will increase Population and Worker Happiness.

The QOL Score is based on the Security, Education, Entertainment and Health QOL "sub" Scores. It will add up [the average] and [the lowest of those 4 sub Scores] and divide that by 2.

The maximum QOL sub Scores are determined by the Assets in the Zone. They'll slowly climb towards these maximums. A turn of Asset disruption will make them slowly decline. Speed of change here is capped at 10% or 5 points per turn, but will often be below.

QOL Points to QOL Scores

Your Assets produce QOL Points and these determine the maximum of each of the QOL sub Scores. The maximum QOL Score is the QOL Points / City Level.

Governor Skill can increase these maximum QOL sub Scores with the Investigation Skill for the Security Score, the Oratory Skill for the Entertainment Score, the Medical Skill for the Health Score and the Science Skill for the Education Score.

The current QOL sub Scores will move at a rate of 10% per turn towards the maximum allowed by the Points produced.

Regime Average Civilisation and QOL Score

Workers are especially sensitive to their relative position compared to your Workers in other Zones.

If the average Regime Civilisation Score is higher than the QOL Score of the Zone, the Workers will lose some Happiness, if the reverse is true and

Zone QOL Score is higher than the average Regime Civilisation Score, the Workers will gain some Happiness.

Militancy

Your initial Zone will start with a high Militancy score of 100. This score can however drop once your military forces start to depend more and more on Regular (and usually paid) forces or because you are not paying enough attention to Militia requests.

The higher the Militancy Score of a Zone, the larger the force the local Militia the local Population will be willing to field. Each Zone has its own Militia with its own replacement pools.

MILITANCY MODIFIER	EFFECT PER TURN	EFFECT PARTIALLY IGNORED IF CAS IS LOW
Loyalty > 50	0 to +5	-
Loyalty < 25	0 to -5	-
Regular Troops Present	0 to -5	yes
Zone Civilisation > 10	0 to -20	-
Militia Profile > 50	+1 to +3	-
Militia Profile < 50	-1 to -3	-
Zone has other Culture than Regime	Militancy limited to 100 – CAS (Cultural Adaptation Score)	

Other Culture Militias

It is possible for you to acquire Zones and end up with Cultures different from your Regime Culture which have a positive Militancy Score. These Populations might well supply you with more exotic Militia forces.

There is a straight and inverse relation to the amount of (military) Recruits and Colonists you can raise and the activity of the Militia in such a Zone. At one end of the spectrum (CAS 0) their Culture has not adapted at all and you'll have loads of Militia Troops of the exotic Culture, on the other side of the spectrum (CAS 100) you'll have a Militia that is not recruiting anymore and Recruitment of Recruits will equal that of Zones of your own Culture.

Once the Culture of the Zone changes (at CAS 100) Militancy will be allowed to rise again. But it will be a new Militia, your Culture's Militia. Any old, previous Culture, Militia Units will however stay loyal and in the field.

Cultural Adjustment Score (CAS)

Only of interest when the Culture of Zone is different from the Culture of your Regime. In this case a CAS of 0 signifies they have done no adapting at all to your Regime's Culture, and a CAS of 100 signifies they have completely adapted to your Culture. A low CAS means no or little recruitment of Recruits and Colonists. A high CAS means no or little Militia recruitment from the original Culture.

At Loyalty 50, CAS starts going up. At Loyalty 100, you should be able to gain up to 5 points per round.

CAS can only go up if the Zone is under Regular administration (as opposed to being Unincorporated).

Unrest

Ideally you will have none. It signifies social, political or other upheaval upsetting the Populace of the Zone.

Unrest has a negative impact on Population and Worker Happiness (half the effect it has on Population).

Unrest also has a major tendency to cause negative Zone Events. The saying is: Unrest causes more Unrest.

Having Troops stationed in the City will reduce Unrest with each Trooper being able to reduce Unrest of 5 Populace up to a maximum of 40%. So for example a Zone with 50,000 Populace and 5,000 Troops in the capital would reduce Unrest with -20%. Each Security Point also reduces Unrest of 100 Populace up to a maximum 40%.

Fear

If present it signifies the Populace of the Zone are (somewhat) afraid of your Regime.

Fear helps reduce Unrest, but also limits Population Happiness and Worker Happiness (less so). It does not impact the Happiness of Workers, since they are considered to be "Regime employees."

The Fear Score is also the percentage chance your population will suffer a 2d10 Happiness reduction as well as your workers suffering a 1d10 Happiness reduction. However if your Autocracy profile is higher than 40 this reduction will be reduced and nullified at Autocracy-80.

Danger

Ideally you will have none. It is an abstract value representing all kinds of physical, criminal, chemical or otherwise threatening dangers that cause distress or death to the Populace of the Zone.

Danger has a negative impact on Population and Worker Happiness (half the effect it has on Population).

Culture

Not all Zones have the same Culture. Initially each Zone has a different Culture with its own identity, language and customs. In most cases the Culture will transform to the Culture of the Regime owning it if given time (and a switch from Unincorporated to Regular Zone).

5.3.3.2. ADMINISTRATIVE ORDERS

There are quite a number of policies your Governor can implement. Call him/her to discuss Zone Orders.

Emergency Food

You can allow Emergency Food to be distributed to the Population if and only if they run into serious shortages and would face Hunger or Starvation if not fed by you.

Emergency Food will be supplied from the SHQ inventory and without cost to your Logistical Network. No logistical cost because civilian vehicles and transport is presumed.

Signup Bonuses and Worker salary

In order to get more Workers, Colonist and Recruits, you can offer either a sign-up bonus or a different salary pay (in the case of Workers).

Recruitment Limits

In order not to get too many new Workers, Recruits or Colonists you can set limits. In the case of Workers, you can even set dynamic limits setting a specific context-sensitive recruitment policy.

Investment in Private Economy

You can order a specific amount of Credits to be invested in the Private Economy of the Zone each round. It will help the Population's Private Credits to more quickly reach the threshold for a Private Economy expansion (new Private Asset) and it will have a positive effect on Population Happiness.

5.3.3.3. LOGISTICAL STATS

The foundation of your Logistical Network is in the Assets in your Zones. There are 2 kinds of Assets that create and extend your Logistical Network.

Logistical Centers

These are either Private or Public Assets located in the Zone City. They provide that Hex with Logistical Points and Logistical Range that will be projected on and (far) outside it.

Logistical Extenders

These are Public Assets known as Supply Bases. They are cheap and easy to build. They extend the Logistical Range of the Logistical Centers. But if the pipeline reaching the Supply Base is already exhausted it will not magically be increased, it will just be extended further than otherwise in its current state. Extension is not cumulative.

5.3.4. ADMINISTRATIVE STRAIN

Nothing forces you to create new Cities (and thus more Zones), but if you have Rural Assets further away than 6 Hexes from the Zone's City they will start to give your Zone problems in the form of Administrative Strain.

The formula for Administrative Strain is: (For Each Asset Beyond Distance (((Distance-6)/6) * Asset level * production%) / (All Other Assets * Asset Level * production%). Administrative Strain is capped at 100%.

In the above calculation, Private Assets count for half of that of Public Assets. Mothballed and Closed Assets do not count, just Asset that are producing.

If your current Administrative Strain calculation result is higher than your Administrative Strain percentage, then the Administrative Strain will increase by up to 10%, or decrease by up to 10% if it is lower. The experienced Administrative Strain thus tends to seep in with time. The effect is gradual.

Administrative Strain denotes the inability of management, support and facilities to be everywhere at the same time. The larger the distances of the Zone's Assets, the more of a strain distance becomes.

Strain causes a negative effect on the Governor's bonus. For example, if the Governor bonus is +30% and Administrative Strain is 20%, the Governor bonus would be reduced to +10%.

Administrative Strain works in granular decile blocks. 0-9% has no effect and should thus be considered a warning. 10-19% gives a 10% penalty, 20-29% gives a 20% penalty, etc.

The remedy to combat Administrative Strain is to create a new Zone around the Asset that is the furthest away so that the Assets remaining with the original Zone are now closer to its City and the strain is thus relieved.

5.3.5. COLONISTS

Through issuing "Zone Orders" to your Governor you can start recruiting Colonists. If you pay them a sign-up bonus, they'll be more likely to sign-up. Furthermore, keep in mind you'll have to feed your Colonists waiting at an SHQ for their settlement destination.

Once sent to a target Zone they will be able to join either the Workforce or the Population. You'll be able to choose. Use the Colonize Order in the Order Tab to do this.

If the Population of the target Zone is different from that of your People, they will influence the Cultural Adjustment Score (CAS) positively in your favour. Upon recruiting Colonists from a Zone with a different People, they'll be considered to be the ones that have already adapted to your Culture. This also means that a Zone that is of a different Culture than your Regime and has a low CAS will not give you as many Colonists as a Zone with a high CAS.

If your Populace is suffering casualties from Exposure, expect it to be a lot easier to recruit Colonists and Military Recruits.

5.3.6. RESOURCES

Each Hex can have resources that you can exploit if you build an appropriate Asset on the Hex. Resource Hexes can have Scavengeable Ruins or Mining Reserves. Ice and snow Hexes can be used to mine Water.

5.3.6.1. HEX PERKS

Some Hexes have a special perk. These Perks model things that are out of the ordinary and present in the Hex. It could be a derelict spaceship that will help your research, a reclusive hermit that will teach your Governor or a house of pleasures to keep up the Morale of your Troops. Just controlling the Hex will give you the benefit of the Hex Perk.

5.3.6.2. TREASURES

When expanding your Regime and taking non-Major Hexes with Free Folk or Hex Perks on them, you'll have a chance to find Treasure. Treasure includes Items, Galactic Republic Grade equipment and Credits.

5.3.6.3. SCAVENGE-ABLE RUINS

These can be exploited by constructing an Asset that can scavenge. Once the Scavenge Points are depleted, it is over and no more Items will be scavenged from this Hex.

5.3.6.4. ARCHAEOLOGY

Your Tech level is much lower than the Tech Level the Planet had before the Dissolution War.

It has just been a few hundred years and there is still plenty of opportunity to find Artefacts in the rubble of the old Galactic Republic.

Archaeological Finds

You'll have the chance to make an Archaeological Find on Hexes with Scavenge Points.

If Artefacts are buried in the rubble of Hexes you own, you'll have a chance to make an Archaeological Find.

This chance is increased a lot if you are allocating BP to the Archaeology Task of your Economic Council. It will provide you with Archaeology Bonus Points.

Without bonuses, your chance per turn to discover an Archaeological Find will be about 2.5% per Hex with Scavenge Points, if there is something to be found; only a small number of Hexes actually contain buried artefacts.

This chance is modified based on the size (if any) of the Archaeological Find.

It is modified upwards a lot by the presence of a Scavenging Asset.

If the amount of Scavenge Points drops below 1,000, the chance to find something reduces rapidly.

Excavating

Once an Archaeological Find has been made you can excavate it.

Excavating is done by normal Scavenging or Recycling Assets. For every X points scavenged on a Hex containing an Archaeological Find you'll have a chance to find an Artefact. The chance will be noted in the Interface.

Furthermore, the following chances to find Machinery and Hi-Tech Items apply:

ARCHAEOLOGICAL FIND	FIND HI-TECH ITEM	FIND MACHINERY ITEM	FIND ARTEFACT
Very Rare	1:250	1:100	Differs per Hex
Rare	1:500	1:100	Differs per Hex
Uncommon	1:1,000	1:250	Differs per Hex
Common	1:2,000	1:500	Differs per Hex

Artefacts

When an Artefact is found, it will become available to you as a Stratagem.

5.3.6.5. MINING

You can find different kinds of mineable deposits in Hexes.

Prospecting

You'll need to Prospect to find raw resources. You'll know some Deposits at the start, but hidden Treasures remain buried. Prospecting is done by one of the Tasks of the Economy Council.

Governors can give a bonus on Prospecting efforts of the Economic Council that are taking place in their Zone.

Governors can also discover new Resources on their own, using their Prospecting Skill.

Once a deposit is discovered it can be mined. Knowledge of its presence will be known by almost all local Populace and thus also to foreign powers that have recon on the Hex.

Keep in mind that the Economic Council can produce the Prospecting Push Stratagems.

Mining Reserves

Each Deposit has a limited number of Items that can be mined before further mining becomes impossible and the mine is closed. This amount varies from Deposit to Deposit.

Natural Mining

There are also some Landscape Types that act as natural Resource sources. Notably Glaciers and Snow Landscapes that allow you to do Water mining.

Mining Ease

Not all mines produce the same number of Items per turn. Some Hexes are harder to mine than others. The level of Mining Ease is indicated for each known Deposit and varies from Deposit to Deposit.

5.3.7. GOVERNOR

You can assign a Governor to each Zone you own. They will administer the Zone and make sure everything runs as smoothly as possible.

Absence of a Governor

Not having a Governor will cause some administrative chaos and consequently a -50% penalty on production of Public Assets. However, it will not impact the Private Economy.

Corrupt Governor

A corrupt Governor will embezzle public investment funds and extort personal taxes from the Population.

5.3.8. FREE FOLK

Free from your direct rule are the people who remain hidden in the vast lands each Zone represents. Do not forget each Hex covers an immense space. These Free Folk mind their own business and are basically inert. However, they can pose a source of Population growth or a sink for Population leaving you.

You can see their settlements on the map.

5.3.8.1. POPULATION GROWTH FROM FREE FOLK

If your Population is not Hungry and Happiness is greater than or equal to 50, then a small percentage of the Free Folk will join your Population. The higher the Happiness, the more Free Folk will join you.

If your Population has a negative cash flow, not enough Food or is Hungry, there will be no Free Folk joining you.

Free Folk will not join you either if there are any substantial Population losses from Exposure Levels in your Zone.

5.3.8.2. POPULATION MELTING AWAY

If your Population Happiness and Loyalty are both lower than 25, then a small percentage of them will join the Free Folk. If there is also Hunger, then an additional and more substantial percentage of them will join the Free Folk.

This effect will be further increased when there are substantial losses from Exposure Levels.

5.3.8.3. FREE FOLK MIGRATIONS

If there are more Free Folk in one Zone than a neighbouring Zone, a small percentage of the more populous Zone will move to the less populous Zone.

The City Level has a strong impact on Free Folk migrations. Free Folk will tend to move into Zones with higher City Levels since there is more opportunity to enjoy a higher standard of living, or for some opportunity for villainy, "bottom feeding" and trading.

Having a high City Level (and a good Population Happiness and Loyalty) compared to the surrounding Zones is a good way to boost your Population levels.

Free Folk will flee Zones where they are suffering losses from Exposure.

Free Folk will not migrate overseas.

5.3.9. WAR IMPACT

There are two war impacts that can affect your Zones: there is the short-term casualty impact and the long-term casualty impact. Casualties represent brothers, fathers, children, etc… excessive casualties hurt the Happiness and Loyalty of your Populations and Workers.

Although some military losses are expected by the Populace, at a certain threshold of casualties, people are going to feel the sacrifice in life is becoming too great.

5.3.9.1. LONG TERM CASUALTY EFFECTS

Last 20 rounds average of casualties are calculated (t-1,t-2…,t-20) and if this average is higher than the Casualty Tolerance of 0.5% + (Fist Profile / 66) then there is a drop in Happiness and Loyalty. As a rule of thumb, the Casualty Tolerance will be around 1%.

5.3.9.2. SHORT TERM CASUALTY EFFECTS

Last 3 rounds average (t-1,t-2,t-3) of casualties are calculated and if this average is higher than the Casualty Tolerance of 1% + (Fist Profile / 33) then there is a drop in Happiness and Loyalty. As a rule of thumb, the Casualty Tolerance will be around 2%.

5.3.9.3. CIVILIANS IN THE FRONTLINE

The Danger Score of a Zone will go up if Enemy Units are close to producing Rural Assets or the Zone City itself. The closer they are to those crucial places the bigger the Danger increase will be.

Danger only goes up if it will be equal or below to 2 times the increase.

5.3.10. DEMOGRAPHICS

There is natural Populace growth, but this growth is quite slow. Natural population growth is positively modified by Fertility of the Culture of the Zone and the Health Score. It is negatively impact by a high Civilisation Score.

5.3.11. CONQUEST

A Zone will come under control of the Regime that occupies the Hex with the City.

5.3.11.1. WHEN?

Once you take over the City of a Zone, the Zone it is still not yours and will be designated as a "Zone in Conquest" during the remainder of your turn.

After you press Next Turn, order will be imposed and the conquest of the Zone will be made official and actually implemented. At start of next turn you'll also receive a Vidcom message and if it is the first time you have conquered the Zone, a Fate Stratagem Pack as well.

5.3.11.2. SOME SPECIAL RULES FOR ASSETS INVOLVED IN ZONE CHANGES

Upon conquest, Supply Bases and Assets still under construction are removed.

Assets which for some reason find themselves outside any Zone will disappear if they are still under construction and otherwise will start to suffer Damage.

Any HQ Assets that are not in a City Zone will be replaced by Bureaucrat Offices.

5.3.11.3. CONQUEST EFFECTS

The moment you conquer a Zone:

- Happiness and Loyalty are inverted. So a Happiness of 80 would become a Happiness of 20.
- Depending on the resulting Happiness levels, some Workers will disappear immediately into the general Population.
- Population might flee the Zone in a refugee wave.
- Any Assets under construction are lost immediately.
- The Zone will start as an Unincorporated Zone.
- Militancy might drop, and the Militia Pool might disperse.
- You will be awarded a free Fate Stratagem Pack (4 Stratagems) if the Zone conquered has 10K Populace or more. Note however that you'll only receive these the first time you conquer a specific Zone.

5.3.11.4. REGULAR AND UNINCORPORATED ZONES

You'll start the game with only Regular Zones, but conquest will give you an Unincorporated Zone.

An Unincorporated Zone has a certain level of independence and it is not fully integrated with your other Zones.

Unincorporated Zones have the following different rules:

- You still receive Service Tax from the Zone.
- You do not receive Private Asset Tax from Private Assets. Private Assets thus do not provide you with any Items.
- The Zone Stats do not impact your Regime Stats, like your Popularity or Culture Level.
- No Sales or Income Tax will be imposed.
- Regime casualties have no impact on the Population Happiness and Loyalty.
- No Recruitment of Colonists or Recruits is possible, but you can still recruit Workers.
- No Cultural Adjustment will take place.

- Unincorporated Zones have double the Happiness growth up to 75 points, compared to Regular Zones.

You can order an Unincorporated Zone to become a Regular Zone at any moment you like. Just call your Governor to discuss Zone Orders.

In general, it is a good idea to leave a conquered Zone Unincorporated for a while, either to get Population Happiness restored as quickly as possible or to ensure you keep benefiting from the option to use their possibly unique Militia forces.

5.3.12. RECRUITMENT

You can recruit Workers, Recruits (military) and Colonists.

5.3.12.1. WORKER RECRUITMENT

Ideally you can recruit up to 5% of the Population per turn. However, this percentage is modified for:

- Population Happiness
- Worker Happiness (if any)
- Difference between Private Credit earnings and Worker Salary

5.3.12.2. COLONIST RECRUITMENT

Ideally you can recruit up to 5% of the Population per turn. However, this percentage is modified for:

- Population Loyalty
- The Heart Regime Profile
- Difference between Private Credit earnings and Colonist sign-up bonus

If your Populace is suffering casualties from Exposure, expect it to be a lot easier to recruit Colonists or Military Recruits.

5.3.12.3. RECRUITMENT OF RECRUITS

Ideally you can recruit up to 5% of the Population per turn. However, this percentage is modified for:

- Population Loyalty (counts a lot!)
- The Fist Regime Profile
- Difference between Private Credit earnings and Recruit sign-up bonus

- Possible Recruitment Penalty caused by Events
- Recruitment Penalty goes down by 10% every round.

If your Populace is suffering casualties from Exposure, expect it to be a lot easier to recruit Colonists or Military Recruits. People will actually want to get out of the Zone!

5.3.12.4. LOSING WORKERS

Workers can leave your employment whenever they desire so. They will do this to some measure when Worker Happiness is lower than Population Happiness.

They will leave in droves if you do not feed them (due to Food shortages) or fail to pay them their promised Salaries.

5.3.12.5. LOSING COLONISTS AND RECRUITS

The only way to lose them is if you do not have enough Food to feed them.

5.3.12.6. DISBANDING RECRUITS

You can always disband Recruits, but only into the Zone where their SHQ is present.

5.3.12.7. CULTURAL DIFFERENCES IMPACT

You'll have the best result recruiting Colonists and Recruits from Zones where the Populace are from your own Culture.

If the Culture of the Zone is different, you not only face the regular difficulty of persuading people to leave their home and face danger, but also to adapt and embrace your Regime's Culture.

If the Zone has Populace that do not have the same Culture as your Regime, the result of these recruitment efforts is modified by the "Cultural Adjustment Score" which can be between 0 (no recruits) and 100%.

5.3.13. LAND-BASED TRADERS

Land-based Traders are an amalgam of small teams, little rogues, companies and clans. They are fragmented because not much capital is necessary to get set up for trading. A small truck and a little manpower will do. These Traders, though fragmented, are tied together by intricate personal networks. They'll be present on markets in civilized and less-civilized lands, they'll organize trade caravans between Zones and Regimes. You can get revenue from your

land-based Traders by imposing Sales Tax and/or Import Tariffs. Traders usually ignore borders with Minor Regimes, but you need to have a Trade Relation with a Major Regime in order for your Traders to trade efficiently with the Traders on the other side of the border.

Traders trade with Major Regimes, the Private Economy and each other.

5.3.13.1. TRADE AREAS

A Trade Area consists of one or more land Zones that are connected within the same Regime. All Zones within the same Trade Area have the same Price Points for buying from, and selling to, Traders.

5.3.13.2. INTER-TRADER TRADE

Traders from different Trade Areas will trade with each other. This way Items can make it from one side of the world to the other side. Due to the diffuse nature of the Trader networks, it can take several rounds or many more for a transfer on one side of the Planet to have an effect on the other side. This inter-Trader trade is subject to Trade Tariffs (set by Major Regimes) when it crosses borders.

Direct trade between Major Regimes is limited to 12.5% of ideal volume if they do not have an official Trade Deal. If however they have this Trade Deal all is done at full efficiency. If the two Major Regimes concerned are at war the resulting Volume is halved, so things can get as low as 6.25% of ideal volume.

The volume of direct Trade with Minors and unaligned Trade Areas is reduced. It is between 12.5% and 50% between a Major and a non-Major. 50% if they are at peace, 25% if the relation is unclear and 12.5% if they are at war.

Two non-major doing direct Trade are always at 25% of ideal volume.

The above percentages clearly show that Major Regimes help trade volume because they are better organized and provide more protection and infrastructure. They also show that without any deals signed the borders of Majors are less porous.

Trade cannot pass at all through Zones that are controlled by very uncivilized aggressive Cultures because these Zones will actually not have any Traders present. This is because the occupants of these Zones will tend to eat, maim or enslave such Traders, as well as prey upon any passing Trader caravans.

These Cultures are: Slavers, Rogue AI, Nomads, Arachnids and Mutants. Note that non-aligned Zones will have Traders.

To determine if an actual trade is interesting the local Market price (average of buy+sell price) of the buying Trade Area will be compared to the local Market price (sell price) of the selling Trade Area. This results in the local buyer's price and the local seller's price. If the local buyer's price is higher than the local seller's price the buying Trade Area will try to make a deal.

Most interesting trades will be considered before less interesting trades. For example Trade Area A will prefer spending its Credits on buying Metal that is 5 times cheaper elsewhere over buying Machines that are only 2 times cheaper elsewhere.

If a Trade Area is based in a Major Regime it will use the Commerce Bonus of that Regime. If the buying Trade Area has a higher Commerce Bonus this will result in a real lowering of the local seller's price. If the selling Trade Area has a higher Commerce Bonus this will result in a trick lowering of the local seller's price, tricking the buyer into making a deal and discovering too late that the real price is actually higher.

If a Trade Area is based in a Major Regime Tariffs might apply to import/exports. If Import Tariffs are in place in the Buyer's Regime it will lower the local buyer's price. If Export Tariffs are in place in the Seller's Regime it will increase the local seller's price.

If after modifications the local buyer's price is higher than the local seller's price a deal will be struck between the Trade Areas. The actual Deal Price agreed upon will be somewhere between the local buyer's price and the local seller's price.

Extreme price differences will skewer the price towards the local seller's price. This effect kicks in if the local seller's price is more than 3 times lower and becomes more pronounced as the ratio increases.

The side with the highest Commerce Profile will furthermore be able to influence the Deal Price the most towards the most advantageous price for them.

A deal is finally struck with a specific Deal Price and Credits and Items are exchanged.

After this deal The buying Trade Area pays Import Tariffs over the Deal Price to its Regime and the selling Trade Area pays Export Tariffs over the Deal Price to their Regime.

5.3.13.3. PRICE POINTS

Trade Areas have two Price points per Item: Buy Price and Sell Price. You'll find these in the Trade Window when you attempt to trade with your Trade Area. These prices are however also used in Inter-Trader Trade.

Trade Areas will have Price points based on the size of the cumulative Trader stocks versus the Populace in the Zones they are active in. The Price points will also be based on the history of local sales. Short term history tends to weigh more heavily for the Traders than long term history.

Also if the Traders are not selling anything it will decrease their Buy Price point and the amounts they are willing to buy.

If a certain Item is in plentiful supply and the Buy Price drops below 0.1 Credit or if the Traders have plentiful stocks they'll not be interested in buying such an Item at all. Of course they'll still be interested in selling such Items, but at a price that covers their operations.

If the Trade Area's Major Regime has a Commerce Bonus it makes the Trader's Buy Price edge up closer towards their Seller Price.

5.3.13.4. TRADER INVESTMENTS

As time goes up imbalances in Credit quantities between the Trade Areas will appear. Once these get too pronounced the Traders of richer Trade Areas will invest in poorer Trade Areas. What happens to these investments (and especially the quid-pro-quo) is all black-box for now, but in the future might very well be expanded upon.

5.3.13.5. PRIVATE ECONOMY

Any dealings with the Public Economy are done through you directly buying or selling Items to the Traders through the Trade Window.

However the Private Economy, without your consent, will deal with the Traders as well.

Notably any Food shortages by either your Population or your Workers (if you do not have the Food available for them) will be resolved by buying Food from Traders (if the Credits are available).

The Zone Private Economy will buy other Items from the Traders too and will do so in the following cases:

- When the Population spends Credits on Luxury Products & Services they will buy the Items necessary for them from the Traders.
- When the Population spends Credits on constructing Private Assets it will buy the Items necessary for them from the Traders.
- When the Population actively spends Credits on luring Free Folk to their City they will buy the Items and services necessary to bribe the Free Folk from the Traders.

In all these above cases the Credits will be used to buy Items at the current Sell Price of the Traders. These Items will be considered consumed. The type of Items being bought by the Private Economy depend on the Tech Level of the Regime. Up to Tech Level 3 it is mainly Oil, Water and Food. On Tech Level 4 and 5 it starts to include a sizable chunk of Metal and Rare Metals as well as more Oil. On Tech Level 6 and higher it also includes Machines, High-Tech Parts and Radioactives. These Private Economy purchases can significantly influence the Price points of the different Items.

Note that the Private Economy can also sell excess Food, privately mined Metals and Oil to the Traders.

Also note that the salaries earned by Workers and Leaders will be spent in the Private Economy and through the Private Economy (see all the discussed above) will at some point cycle back to the Traders.

5.3.13.6. TRADERS WANT TO HAVE FUN TOO

The Traders don't have an easy, nor (often) a safe life. They work hard and their objective is to enjoy the fruits of their labor. This happens every round as they consume a very small percentage of their stocks. It requires higher Tech Levels of their Regime for them to consume Rare Metals (level 4), Machines (Level 5), High-Tech Items (Level 6) and Radioactives (Level 7) however. The quantity of this consumption of each Item is maximized to (very) roughly the Population & Free Folk in their Trade Area divided by 100. This consumption models them eating ,drinking, even feasting, paying for services, recruiting new staff, as well as the construction of a plethora of consumable Luxury products to keep their happiness up.

5.3.13.7. TRADER TREASURES AND THE MONETARY CONSTANT

The Traders also play a role in keeping total Credits in the system close to the Monetary Constant. Once too many Credits enter the system compared to total planetary Populace, the Traders will start putting part of their Credits in Trader Treasures (and thus taking those Credits out of circulation). Furthermore, they'll start decreasing the price they are willing to buy Items for. When too few Credits remain in the system, the Traders will start scavenging their Trader Treasures (and thus putting more Credits in circulation).

5.3.13.8. TRADE RELATIONS

You need to have trade relations with a Major Regime in order for your Traders to trade efficiently with them. If you have a Trade Deal with another Major Regime, the Traders of both Regimes can do business directly. If you have a "Free Trade" pact then any tariffs you might have set are overruled and nullified.

5.3.13.9. CAPTURE AND TRANSFER OF TRADER INVENTORY

If one Trade Area's Regime (or MTH) captures the last Zone of another Trade Area it will also capture all its inventory. When a big land Trade Area gets split up in two pockets the original Trade Area will continue in the most important pocket, while a new Trade Area will be formed in the smaller (pockets). Note that Credits and Inventory will be distributed pro-rata (with a heavy emphasis on Workers, and then Population, and then Free Folk).

5.3.14. TAXATION

There are some standard taxes that give you income. These are the Service Tax and the Private Asset "Tax". These you cannot raise or lower, but you can set and impose Income and Sales Taxes, as well as Tariffs.

5.3.14.1. SERVICE TAX

This is a standard tax paid by all Population in any Zone. Even if you are doing a lousy job ruling the Zone, or you did not even appoint a Governor... you are still providing basic enforcement services and minimal administration.

For these services you provide to the Populace, a fixed amount of Service Tax is charged.

Expect the following Service Tax income:

- 20% of Credit income generated by Private production and the Hidden Economy, modified for Administration Skill of Governor.
- 6% + (1% per Regime Tech Level) of Pop/100 in Industrial Points (IP).
- 1.5% + (0.5% per Regime Admin Level) of Pop/100 in Bureaucratic Points (BP).

5.3.14.2. INCOME TAX

Paid by Population when they earn Credits by Private Asset production, the Hidden Economy, Selling Food or by Workers spending their Salary in the Private Economy.

Rate can be set using Stratagems of the Interior Council.

5.3.14.3. PRIVATE ASSET "TAX"

Part of the production of some Private Assets like Farms goes directly to you. This is basically due to the fact that, in some part, your staff or personnel are helping in the efforts of the Asset. Its also custom to pay the Lord a share. This "Tax" is also known as the "Due". You can clearly see on each Asset what is produced for you and what is produced for the Private Economy.

5.3.14.4. SALES TAX

Paid by Traders when they sell Food or other Items to the Population.

Rate can be set using Stratagems of the Interior Council.

5.3.14.5. IMPORT TARIFFS

Paid by Traders from your Zones when they buy goods over the border.

Rate can be set using Stratagems of the Interior Council.

5.3.14.6. EXPORT TARIFFS

Paid by foreign Traders when they buy goods in your Zones.

Rate can be set using Stratagems of the Interior Council.

5.3.15. ZONE STATS INTERACTIONS

An overview of how some of the Zone Stats influence each other.

CONDITION	EFFECT
Civilisation > QOL	Reduce Pop Happiness and Civilisation
QOL >= Civilisation	Increase Pop Happiness and Civilisation
Unrest present	Decrease Pop Happiness Reduce Worker Happiness (half)
Danger present	Decrease Pop Happiness Reduce Worker Happiness (half)
Fear present	Decrease Unrest
Fear present	Limits Pop and Worker Happiness
Loyalty > 50	Decrease Unrest
Moderate Pop Happiness >50	Increase Pop Loyalty
Low Pop Happiness <25	Decrease Pop Loyalty
Loyalty > Happiness	Decrease Loyalty slightly
Happiness > Loyalty	Increase Loyalty slightly
Time goes by	Decrease Fear, Danger and Unrest
Unincorporated Zone	Higher Pop Happiness rise
Income Tax	Lower Pop Happiness rise

5.3.16. ZONE EVENTS

Having certain statistics at low (or high) levels can have consequences in terms of certain Events being triggered.

These fall in the main categories of Population Unrest Events, Worker Unrest Events, Danger Events and Rebel Events.

High Health, Culture and Security scores can help protect you against some of these Events.

5.3.17. REBELS

Things can get so bad your Population and/or your Leaders might rise up against you.

5.3.17.1. REBEL FORCES

Rebel Forces have their own Regime that mirrors your Diplomatic Relations with other Regimes. Except for the fact that their Regime is also at War with you.

Rebel Units are considered to have their own hidden methods of supply using a covert Logistical Network, much like Militia, except for the fact that they do not need a supply source to connect to.

Rebels might come from very different backgrounds, with very different motivations. The thing that unites them is their joint struggle against you.

5.3.17.2. REBEL MANPOWER

Rebel Manpower is Population and Workers that are ready to pick up arms whenever they are activated by Rebel leadership. Rebel Manpower can grow through serious Unrest events like Agitator or Independence Rally. Once Rebel Manpower reaches a sufficient size, a new Rebel Unit is activated.

At the moment Rebel Manpower numbers are hidden from your view.

5.3.17.3. REBEL SUCCESS

Once Rebel Forces actually conquer a Zone, they will form a new Minor Regime. This Minor will be at war with you as the founders have not magically forgotten about what happened before.

5.3.17.4. REBELLION BY LEADER

Disgruntled Leaders, especially those of the ambitious kind, might join the Rebels and raise forces (or subvert Units).

The chance of it happening and the amount of Population and Workers supporting the Rebellion will depend on the Population Loyalty.

When it concerns a rebelling Commander, the Units in her/his chain of command might join the Rebellion and low Unit Morale will expedite this.

In general, it is a bad idea to have an ambitious and disgruntled Governor in a Zone that lacks Loyalty. This kind of Rebellion is a direct attempt to take the Zone City with popular support from the Populace. It either fails or succeeds immediately.

5.3.18. ZONE INVENTORY AND LOGISTICS

Each Zone has its own Items Inventory in its City. All Public Assets take Items from it or deliver to it.

For Assets outside the City, there needs to be a number of Logistical Points present on the trajectory from the Asset to the Hex. For Public Assets, 100

Logistical Points per highest Asset Level in the Rural Hex, for Private Assets half that.

5.3.18.1. INVENTORY

The Inventory can consist of a myriad of Items that serve different uses. It can be inspected in the Bottom Items Tab.

5.3.18.2. MAXIMUM STORAGE

Some Items have a maximum storage amount. For some of these, this maximum can be expended by constructing specific storage Assets that provide Storage Points.

Before Items above Maximum Storage are simply lost, your local minions will try to sell them to the Traders.

Basic Maximum Storage Points are:

ITEM TYPE	BASIC MAXIMUM STORAGE POINTS
Water	250 + (Zone Populace * 3) + Free Water Prod.
Food	250 + (Zone Populace * 3)
Fuel	250 + (Zone Populace * 3)
Ammo	250 + (Zone Populace * 3)
Energy	(Zone Populace * 0.5)
IP	250 + (Zone Populace * 3)
Metals, Rare Metals, Radioactives	Unlimited Storage
Machines, Hi-Tech Parts	Unlimited Storage
Recruits, Colonists	Unlimited Storage

5.3.18.3. SHQ LOGISTICS

Each Zone can be assigned to a, if you want, different SHQ. This is important since SHQs are what connects your Zones into a larger public economy.

SHQ Storage

Any Storage Points not used at Zone level will be used by the SHQ the Zone is assigned to.

SHQ Deliveries

If a Zone is missing certain Items for production or construction, they will be requested from its SHQ and be sent over if possible. If the SHQ is on a different Hex than the City than this will use and consume Logistical Points.

SHQ Pick-ups

If a Zone has stockpiles of Items that will not be used for immediate production or construction, they will be picked up by the SHQ to be added to the SHQ Inventory. Another Zone or Unit might need them. If the SHQ is on a different Hex than the City this will require and consume Logistical Points.

5.3.19. PUBLIC ECONOMY

The Public Economy envelops your Workers and all Public Assets that are directly and fully under your control.

Almost all these Public Assets need certain Items and Workers to produce. The Items will be taken or delivered from or to the Zone Inventory. Furthermore, your Workers need to be fed and usually paid at least something.

For that to work in case of an Asset outside the City, there needs to be an uninterrupted Road with Logistical Points through friendly territory from the Rural Asset to the City of the Zone. See Zone Logistics further above for more information.

5.3.19.1. WORKER POINTS

Almost all production and construction of Public Assets requires Worker Points. Each Worker equals 1 Worker Point.

5.3.19.2. PRODUCTION PENALTY

Some Zone Events, like a strike of your Workers, can cause Public Asset production penalties. This penalty signifies the percentage of production reduction.

Rule detail: Note that to avoid a very small penalty (like 1%) leading to construction time increasing with a full turn a random roll is made for those small percentages to see if no penalty is applied or 50% penalty is applied. Also when it concerns production of very low quantities and a small penalty a similar mechanism is used.

5.3.19.3. PRODUCTION LIMIT

Public Assets can have their production limited via your orders. You can choose between full, 75%, 50% and 25% production. If you want 0% production, you'll have to Mothball the Asset in question.

5.3.20. PRIVATE ECONOMY

The Private Economy concerns what your Population is doing. It is almost completely beyond your control, although you can tax it and/or help it along.

Here is a quick overview of Private Economy In and Out flows:

INCOME	EXPENSES
Private Assets Credits production	Buying Food
Hidden Economy (first 10K pop)	Buying Luxuries (through buying Resources)
Worker/Leader/Soldier Spending	Buying Assets (through buying Resources)
Selling Private Food/Metal/Water/ Fuel	Buying Free Folk settlers
	Service Tax
	Income Tax

5.3.20.1. PRIVATE ECONOMY CAN STIMULATE MARKET

The buying and fabrication of Luxury products and services creates a demand for Items with the Traders and allows prices to go up over time (and for Major Regimes gives the opportunity to profit from this by selling).

All Tech Levels create demand for Food, Water and Fuel.

Tech Level 3-9 also creates demand for more Fuel, but also Metal and Rare Metals.

Tech Level 7-9 also creates demand for Machinery, Hi-Tech Items and Atomics.

The same goes for the construction of Assets. To build the Private Assets, the Population buys Items and services from the Traders.

5.3.20.2. PRIVATE ECONOMY CONTRACTION

If disaster strikes or if your Regime is recruiting big loads of Workers, Recruits or Colonists, the Population might shrink so much it will start to have less Population than Private Jobs. At some point the Private Economy will start Mothballing and Closing down Private Assets if this happens. Once expansion starts again the Private Economy will favour re-activating those Mothballed or Closed Assets above constructing new ones.

5.3.20.3. HIDDEN PRIVATE ECONOMY

Even if there are no Private Assets in the Zone, stuff is still going on in the Private Economy. It is just not very visible for the player.

It is important to understand that every Zone must have something of at least some Economic interest that is rare and has a high benefit to any really small Population exploiting it.

Small Populations (several thousand or less) earn some Credits by dealings with the Free Folk, scavenging, brigandage, swashbuckling and various other activities such as escorting Traders. These activities make up the Hidden Private Economy and allows small Populations to buy Food and save-up credits.

This effect tapers off quickly as the Population gets larger. No large Population can survive solely from these kinds of rare opportunities and small scale activities.

The design goal with these rules is to allow a small Population to survive if no Private Economy Assets have yet been constructed.

5.3.20.4. SALARIES SPENDING IN THE PRIVATE ECONOMY

Workers usually receive a salary. Since they are already "fed" by you as a basic payment, they'll spend their salary in the Private Economy. The same goes for your Soldiers, Recruitment Bonuses of Workers and Colonists and your Leader salaries.

Note that Workers and Soldiers will spend in the Zone they are present in, though both will spend (partly) elsewhere if not enough Population in Zone. In the latter case, we'll assume Traders will help out bridge the distance.

Note that Leaders will spend their salaries throughout the Regime and thus in multiple Zones, as they are presumed to have many dispersed interests and hidden endeavours.

If a Corporation is active in your Regime, they'll also spend their Credits in the Private Economy, just like the salaries are spent.

5.3.20.5. POPULATION MIGRATION

If Population can find a better Private income in another Zone, they'll be tempted to migrate. Also, if Worker Jobs are available with a better income in a neighbouring Zone, they'll be tempted to migrate.

This means that once, for example, you have founded a brand-new Zone with almost no Population, but you start constructing Assets and looking for Workers (offering a good salary) there will be Population from neighbouring Zones that will move in.

If you have a Free Movement deal with another power, Population will also move over borders, as if there were friendly Zones on the other side. With a Free Trade deal this is for 25% the case, as borders already become slightly porous, but with lower trade deals or no trade deals, Population will not be allowed to move over the border.

If CAS is low, that Population will not migrate, or much less so.

QOL, Unrest, Danger, Private Credits reserves and Loyalty are also taken into account, as well as modeling some people just liking certain outback Zones (randomness).

Population will also migrate if they are suffering losses from Exposure Levels (and in that case will even ignore to some degree the CAS level as well they will ignore closed borders with other Regimes if in fear of their very lives).

Population will not migrate overseas."

5.3.21. ZONE MERGE

You can call your Governor to discuss a Zone Merge. When doing a Zone Merge two Zones will merge into one Zone. This order is meant to join small insignificant Zones to bigger ones and avoid an unmanageable Zone count. The Zone merging into another (and thus disappearing) must have a City, must have lower Populace than the target Zone, must have its City within 12 Hex of the target Zone's City and must not be your Capital City. Furthermore Zones with City Assets cannot be merged into another, you'll first have to Disband any such Assets. There are special rules for merging Zones with different Cultures and doing this will result in the merging Zone losing Populace and might even result in a rebellion. Also imperfect Loyalty will cause the merging Zone some Happiness loss, so will moving workers into a Zone that has lower salaries.

5.3.22. BUNKER POINTS

Asset levels provide 5-12 Bunker Points per level. This makes urban and industrial centers a bit easier to defend. Specialized Bunkerization Assets provide orders of magnitude more Bunker Points and can be constructed anywhere. Bunker Points reduce structural damage done to their Hex. Each Bunker Point halves one Structural Damage Point. Also Bunker Points give an entrenchment bonus to the defending Troops in the Hex: 10 Bunker

Points give 1 Subformation (100 soldiers for example) a 25% bonus on its entrenchment. Note however that Bunkerization does not protect against Radiation: For that you need to build Anti-Radiation Infrastructure.

5.4. CULTURES

Every Regime and Zone belongs to a certain Culture. The Culture of a Zone can through the Cultural Adaptation Score (CAS) join its new owners Culture. A Regime's Culture will never change.

5.4.1. MAJOR REGIME CULTURES

Player controlled Major Regimes will always have a Culture that is of the mixed kind. AI controlled Major Regimes will have a Culture that belongs either to the Militarist, Republican or Theocratic kind.

5.4.1.1. MIXED

This Culture is used by Human players. It's a Culture that had many infusions of different kinds of people and is yours to guide. Behaviour depends on the Human player's actions and responses.

5.4.1.2. MILITARIST

This Culture is used by Major Regime AIs. It is a Culture formed from a violent past. It is likely a few decades ago that the Militarist Culture in question was just a Minor Raider Regime. However, things have moved on and not all Leaders of this Culture resemble their forefathers.

No Militarist Culture will ever ally with you.

They'll usually be autocratic and have a politbureau.

Isolationists

These guys resemble a light version of the most violent of the Expansionists. However, they'll be hesitant to go to war unless they feel they have a firm advantage. They are also unlikely to stoop as low as to engage in blackmail.

Expansionists

Almost the most aggressive guys in the game. They'll be very unlikely to become your Friends and will be eager to go to war, even if they are actually weaker than a potential target of their hostility. If they are not actually

driving their tanks into your territories, they'll be quite likely to try to blackmail you. War is the keyword for them.

Federalists

These guys are actually quite agreeable by Militarist standards. They don't see military conflict as the sole form of conflict resolution. Hence you can actually get them to become Friends. They tend to focus more on Research than the other Militarist Factions.

5.4.1.3. REPUBLICAN

This Culture is used by Major Regime AIs. It is generally a Culture formed from more peaceful people. Usually they are strongly focussed on farming. But they have power now and what they'll do with it is not necessarily peaceful.

Only the Syndics Faction will never ally with you.

They'll usually be democratic and have a parliament.

The Realpolitikers and Corporatists are the only AI Factions that are willing to go as far as to sign a Victory pact with you.

Realpolitikers

The Faction with the most reasonable guys in the game. They just want to keep the peace and prosper without going to any extremes. Even though they are not aware of it, in many ways they most resemble the old Galactic Republic in their spirit. You'll have a good chance to build a solid relation with a Regime led by this Faction.

Syndics

These guys are ideological and they hark back with their crazy ideas all the way back to the days of the Dissolution War. They'll have no qualms about deciding that you are an enemy of the people and declaring war on you. They are not very rational.

Corporatists

Profit is what counts for this Faction. They'll focus on the economy and rational analysis to determine if war will bring them profit or losses. They might be very friendly with you if they have something to gain from it, or if they feel weak compared to you. They are not held back by any morals and will have no qualms in blackmailing you if they think they can.

5.4.1.4. THEOCRATIC

This Culture is used by Major Regime AIs. It is generally a Culture formed from traumatic experience way back in the past. Usually they are strongly focussed on farming. But they have power now and what they'll do with it is not necessarily peaceful.

Only the Crusaders will never ally with you.

They'll usually be meritocratic and have a senate.

Doctrinists

The Faction with guys that are averse to change. They just want to keep power and safeguard religious doctrines. They are perhaps an ugly lot, but as a neighbour you could find worse. They can move in many directions and will not be biased by religious considerations when dealing with the outside world.

Crusaders

These guys are the most crazy and ideological of all you can encounter. They can go to war for religious reasons. They will not make good calculations or use much rationality in geopolitics as they believe God will guide them to victory. As an infidel, you deserve only one thing in their eyes. Prepare for war if this Faction is your neighbour.

Humanists

Priests turned philosophers. They are unlikely to be eager to go to war. They will be open to any offer of friendship from your side. Though of course their humanity should not be taken for granted.

5.4.2. MINOR REGIME CULTURES

There is quite a diversity of the kind of Cultures you can encounter where it concerns Minor Regimes. Some of them might even be non-human.

5.4.2.1. RAIDERS

The tough bunch. They are as aggressive as they are undisciplined. They can threaten you, attack you and generally make themselves a pain. They'll eventually field some tough Militia Units. Better clean them up before they get stronger.

Usually it is quite hard to bend their Populace to your Culture once (and if) they are conquered.

5.4.2.2. FARMERS

The inverse of the Raiders, if any. After high technology started failing these people turned to farming to ensure their survival. They managed to build a small and stable economic base that allowed them the stability to survive. They often have a sizeable defensive Militia to keep them safe from rogue elements. Being a farmer in times of anarchy is not exactly a job cut out for a pacifist. They'll usually be quite eager to accept your protection, but will fight if provoked. You are likely to find more of these Minors on Planets that had agriculture as a fallback after the Galactic Republic broke down.

5.4.2.3. SLAVERS

The Slavers are even worse than the Raiders, but usually occupy very poor Zones and do not have large armies. They might have superior equipment at the start of the game though. If they conquer a Zone, they'll slowly diminish the Population by selling them as Slaves. Doing this swells their ranks with new Troops that they'll buy with their profits. Slavers do not do diplomacy, but they might make demands.

5.4.2.4. SURVIVING AI

These machines (normally low-level Sentinels) are still under control of an autonomous AI mind that somehow survived the Dissolution War. This can be a very tough foe to face early in the game (if many Sentinels survive). However, due to their programming, they usually only become aggressive once you reach Tech Level 4. Searching them out might still be a bad idea though… you never know with ancient machines, right?

Furthermore, when they enter human lands they will kill everybody, irrespective of whether they are civilians or combatants. Trying diplomacy with them is completely impossible.

5.4.2.5. NOMADS

These guys resemble Raiders, but they have no home and they live like the Free Folk. Only difference is they are more organized and they have some organized large fighting forces. These might pose a challenge for you, but that is relatively unlikely. Nomads are rather savage and will not be very

likely to engage in Diplomacy. Last but not least, the usage of some native or once-upon-a-time imported beast of burden enables the lifestyle of these people and you'll probably encounter some cavalry Units when doing combat with them.

5.4.2.6. RELIGIOUS FANATICS

A Minor that is usually hostile to diplomacy and crewed by fanatics. They have high Morale and will rarely retreat from combat. You are likely to find them on Planets where surviving the aftermath was especially tough and unspeakable acts took place. These grim dark ages gave birth to the priests that today still lead these Fanatics.

5.4.2.7. ARACHNIDS

A non-human Minor. These spider-like creatures are on the verge of consciousness and are found on many Planets. They have very tough carapaces and slow metabolism and they survived almost everywhere they were present when the Dissolution War happened. Why they had a small presence on so many human Planets is a question whose answer has been lost in time. Diplomacy is impossible, and they'll kill any humans (civilian or military) they can get their hands on.

5.4.2.8. MUTANTS

Nominally Human, but they have been warped by genetic weaponry. They do not do Diplomacy, they tend to massacre human civilians if they get their hands on them and they reproduce relatively quickly. However, they are physically weak, especially when under attack.

5.4.2.9. HUNTERS

You'll only find these guys on Planets that have edible Alien Lifeforms. They reverted to a mode of hunting-gathering to survive after the Dissolution War. When you encounter them they'll usually be relatively small in Population size, but beware as they adapt to the times and can grow rather large Militias. Furthermore, they can have a high fertility rate. Their infantry Militia forces are quite tough in combat, especially if you are facing them in forested Hexes. They are usually open to diplomacy, but one Clan might differ from another.

5.4.2.10. ALIEN NATIVES

It is possible that xenobiological evolution on this Planet has given birth to intelligent life. If this is the case you might find some Minor Regimes that are organized alien native regimes.

LIFEFORM CLASS	ALIEN NATIVE CLASS
Sponge Coral Mollusc Squid Jelly	Cephaloids
Worm Blather	Vermoids
Crustacean Arachnid	Insectoids
Reptile	Reptiloids
Mammal	Felines

Alien natives act much as other non-city minors as Slavers or Nomads. They can declare war on you and interact with you through events. They might want things from you or just be curious… or worse... You can actively initiate diplomacy with them through the Xeno Diplomat Stratagem (generated by the Foreign Affairs Council). It is possible to recruit mercenaries from them or get them to join your regime.

Their Trooptype strength depends on the non-sentient lifeform they evolved from as well as their technology level.

5.5. ASSETS AND PRODUCTION

Whether it concerns Public or Private Assets, the core rules for construction and production are the same. It is just that in the case of Private Assets, items produced mostly flow to the Private Economy, instead of to your Zone Inventory.

5.5.1. MANAGING YOUR ASSETS

Private Assets will appear and be managed by themselves, but if you want Public Assets you'll need to construct them.

5.5.1.1. PRE-REQUISITES

There are only a limited number of Assets that you can construct without any conditions.

Levels

Most Assets can level up. However, this is conditional on the City level of the Zone and the Tech, Admin and Civilisation Levels of your Regime.

The maximum level you can level up to is that of the City Level for Public Assets. Private Assets levels are not limited by City Level.

Depending on the kind of Public Asset, whether it is Administrative, QOL related or Productive respectively, the Regime Admin Level, Civilisation Level and Tech Level determine the maximum Asset Level. Private Assets are not limited in this way.

Pre-existing high levels that are above your maximum level are tolerated; just imagine the Workers or Population in that Asset do not fully understand how to get to such a level, but are able to follow established practices and existing manuals to use the machinery and maintain it.

5.5.1.2. CONSTRUCTION

To expand your Public Economy, you need to order new Assets to be constructed.

Construction usually takes several turns, every turn a number of Worker Points and Items will be consumed. If not enough of either are available, then delays will be incurred.

Keep in mind that during construction you'll also have to pay the Upkeep Cost of the Asset. This is partly done to avoid unfinished constructions never degrading if construction stalls.

For Private Assets there is no need for a Logistical connection during construction.

Dirt Road to a construction Site

In order to start construction at least a Dirt Road has to be present. You might be obliged to pay some Industrial Points upfront to render the construction site accessible. The interface will notify you if this is the case.

Cancelling construction

You can always cancel construction as long as the Asset is not yet finished. If you do so, you'll recover half the Items you've used so far, except of course for the Worker Points. Any Dirt Road that was constructed will not be able to be cancelled.

5.5.1.3. UPKEEP & DAMAGE

Almost every Asset, whether Active or Mothballed, will need some Upkeep. Upkeep takes Worker Points. It is the kind of work that keeps the Asset in a proper and well-maintained state, ready for use again when needed.

If there are insufficient Worker Points to perform the Upkeep, the Asset will take up to 100 Damage Points.

At (200 * Level) of damage, the Asset will stop being productive.

Above this threshold, each excess point will translate to a 0.1% chance to lose the Asset due to irreversible structural damage.

Damage also has negative effect on production.

Furthermore, damage can also be taken during combat in Hex. The amount depends on the Structural Damage Points of the Troop Types used in combat. Artillery is more likely to do damage than infantry and, for example, nuclear weapons tend to do much more damage than artillery.

5.5.1.4. PRODUCTION

If an Asset is in Production Mode it is producing. Production requires input Items. If all Items are available then output will be at maximum. However, if fewer are available, output will decrease proportionally.

Keep in mind that Upkeep is done before production. And if you have fewer Workers than Jobs needing to be done, it might be wise to close some of your Assets. It is more economic to have full production from some Assets, than little from all.

You need 100 initial Logistical Points per Level (non-cumulative) to the Hex of the Asset for full production. Missing Logistical Points can make production drop all the way to 0%. For Private Assets only 50 initial Logistical Points per Level are required and if Private Assets are missing initial Logistical Points production their production can be reduced down to 50%.

5.5.1.5. ASSET DELEGATION

Only Rural Public Assets that are directly under your control can be delegated.

These Rural Assets can be delegated to other Zones than the one in which they find themselves. This allows a certain flexibility in the wide open lands between the Cities of the Zones.

Keep in mind that Zone Delegation too far away can cause Administrative Strain for the Zone you are delegating too.

A delegated Asset can not be upgraded to the next Level. Delegation is an emergency measure and for structural assignment it is better to change the Zone borders.

5.5.1.6. MOTHBALLING

If you Mothball an Asset, it means you stop production. However, Upkeep requirements will continue. A Mothballed Asset can be switched back to Production Mode at any point.

Mothball mode can also be used to repair without spending production costs for severely reduced production potential of a specific Asset.

5.5.1.7. NATIONALIZING

This is a way to turn a Private Asset into a Public Asset. It can only be done with certain types of Private Assets, notably: Logistical, Farming and Mining ones. Furthermore, you'll have to pay indemnities to the Private owners and on top of that it causes a Happiness drop.

5.5.1.8. DISBAND ASSET

Assets can be disbanded level-by-level at some PP cost and allow you to recuperate 33% of the construction items (except IP). Note that disbanding Private Assets will incur a drop in Population Happiness and will return the recuperated Credits to the Private Economy.

5.5.2. OPEN FARMING RULES

Agricultural Dome Assets function much like your Industries. Make sure you have the needed Worker Points and Water and Food will be produced. It is very much a contained system.

However, Open Farming is exposed to the Environment and this impacts its production.

5.5.2.1. ENVIRONMENTAL MODIFIERS

The following modifiers are imposed by the Zone weather and Planetary conditions. These modifiers are different depending if you are farming with Terran or alien (Xeno Farming) crops.

ENVIRONMENTAL CONDITION	TERRAN FARMING
Biohazard Level 1	-10%
Biohazard Level 2	-30%
Biohazard Level 3	-60%
Biohazard Level 4	No harvest
TAATL (atmosphere) Level 1	-10%
TAATL (atmosphere) Level 2	-30%
TAATL (atmosphere) Level 3	-60%
TAATL (atmosphere) Level 4	No harvest
Temperature below 0c	No harvest
Temperature between 0c-10c	Limited harvest
Temperature between 35c-60c	Limited harvest
Temperature above 60c	No harvest

ENVIRONMENTAL CONDITION	XENO FARMING
ANTL (alien nutrition) Level 1	-10%
ANTL (alien nutrition) Level 2	-30%
ANTL (alien nutrition) Level 3	-60%
ANTL (alien nutrition) Level 4	No harvest
Temperature below 0c*	No harvest
Temperature between 0c-10c*	Limited harvest
Temperature between 40c-60c*	Limited harvest
Temperature above 60c*	No harvest

* These temperature ranges can differ from Planet to Planet since alien plants might have evolved special adaptations to hot or to cold weather.

5.5.2.2. AREAL

Open Farming has a big advantage over Domed farming in that it will expand its Areal to neighbouring Hexes. Although a single Hex (200x200km!) is more than large enough to support a very large number of farmers the choice picks of land are always rare. That is why, with time, an Open Farming Asset will develop activities outside its own Hex where choice picks of land are still available. Areal also represents the range in which operations are taking place, not only the amount of operations.

Each Areal Hex gives a +5% production modifier. An Areal Hex can only be used by one Asset at a time. Usually an Areal Hex is assigned to the closest agricultural Asset.

Every turn there is a 25% chance the Areal will be expanded.

Maximum distance range between an Areal Hex and an Asset is 3 Hexes. The Hexes in question must be accessible through Friendly Territory.

With full Areal (ideal terrain around assumed) around an Asset it will have almost 36 Hexes of Areal. Which will mean almost 200% production bonus. This is the true big advantage of Open Farming over time.

5.5.2.3. WHEN TO USE DOMED FARMS?

If temperatures, drought, biohazards, incompatible atmosphere or alien crops that are not digestible limit your options for Open Farming, you'll have to revert to Domed Farming.

It is more expensive to construct, but it does reduce Water usage and provides stable harvests in all seasons.

Note that the Planetary Report will give you free advice on what kind of farm it is best to build.

5.5.2.4. SCAVENGING RULES

You can find scavengeable Items in Ruins Hexes. Build an appropriate Asset in such a Hex and you can extract Items as long as Scavenge Points remain in the Hex.

Rich Scavenging Area Rule

You'll get +25% extra Scavenge Items for each scavengeable Hex directly around the Assets Hex and +10% for such Hexes at range 2.

5.5.3. WATER RULES

On some Planets, you do not need to worry about Water as lakes, Rivers and rainfall will be plentiful.

On others, Water management might really merit your attention.

On some Planets, Water scarcity will be a serious issue. If it concerns a Private Asset, Water is assumed taken care off by local and small-scale water collection, trade, storage and or natural rains.

If it concerns the Public Economy, the Water need of the Asset is determined by the Asset Input requirements, but can be modified by plant genetics and the temperature.

Earth plant life uses less Water if temperature gets lower, though at some point starts to have reduced harvests as well in low temperature Hexes.

Alien plant life can be different from earth plant life if it has evolved special adaptations.

5.5.3.1. ASSET BASED WATER COLLECTION

Open Farming Assets will use any rain* 2 in the current round and use it as free Water input for farming activities. So if it rains the equivalent of 400mm/year during a turn it means 800 Water is already considered supplied to the Open Farm. On top of this every Areal Hex outside its Asset Hex will add rain/2 per hex to the free Water input for farming activities. Any remaining requirement will be taken from the Zone Inventory.

5.5.3.2. FREE WATER INCOME

There are some sources of easy collection.

SOURCE	WATER QTY
Zone touches any Minor River*	500**
Zone touches any Medium River*	1,000**
Zone touches any Major River *	1,500**
Zone touches sea (usually salty)	2,000**
Zone touches any Extra Large River*	3,000**
Zone touches lake (usually fresh)	5,000**
Highest rainfall hex*	mm/y this turn* 4

* The rows above that returns the highest value is actually used
**Multiplied by the cube root of the number of hex sides

There are thus limits to free Water collection, even if it is plentiful. If you want more Water collection you'll have to construct some collection Assets (Ice Mining, Wind Traps or Water Purification).

Total Zone free Water collection cannot be larger than your Populace in the Zone. So for example a Zone with only 5K Populace can max receive 5K Water.

5.5.3.3. WATER EXTRACTION ASSETS

The Water Purification Installation is the Asset that will give you the most bang for the buck. It needs to be placed next to a Lake or sea Hex.

For Planets without open Water, you might want to consider building Wind Traps if there is some trace of Water vapour left in its atmosphere.

Ice/Water deposits can sometimes be found underground as well and can be mined by constructing the Ice Mine.

Glaciers and Snow Landscapes are also open to Ice Mining. However, keep in mind that Glaciers give a much superior return compared with Snow Landscapes.

5.5.4. ITEM TYPES

This section will discuss Item Types in detail, including what each Item Type is and where you'll need it for during the game.

5.5.4.1. ITEM TYPE LIST

Let's take a look at all Item Types in the game.

Fuel (also known as Oil)

Usage: Fuel is used by Mechanized and Motorized Units. Without it they'll lose mobility. Fuel can also be used by Power Plants that turn it into Energy.

Production: Oil resource Hexes can be found and mined if Planet has had a history of organic life. Otherwise it will need to be synthetically produced.

Metal

Usage: Metal is used for a variety of Asset construction tasks as well as almost all Troop Type production.

Production: Metal resource Hexes can be found and be mined. They are more abundant on Planets with more heavy cores.

Rare Metals

Usage: Rare Metals are used for construction of more advanced Assets and Troop Types.

Production: Rare Metal resource Hexes can be found and be mined. They are more abundant on Planets with more heavy cores.

Water

Usage: Water is used by your Agricultural Public Assets. Without Water you will not be able to produce Food.

Production: Water will be collected free of charge if your Zone has rainfall, lakes or Rivers.

Food

Usage: Food is consumed by your Workers, Colonists, Recruits and Soldiers. Without it they will starve.

Production: Food can be produced in Agricultural Assets.

Industrial Points (IP)

Usage: Like Metal, Industrial Points are used for a variety of Asset construction tasks, as well as almost all Troop Type production.

Production: Is produced by Industry Assets.

Recruits

Usage: Recruits are needed to produce or raise new Troops.

Production: They can be recruited in your Zones.

Ammunitions (Ammo)

Usage: Ammo is expended by your Troops when they do battle. Without sufficient Ammo, their performance will be much reduced.

Production: You can produce it by expending Metal and IP Items.

Colonists

Usage: Colonists are needed to found new Cities or to increase the Population of existing Zones.

Production: They can be recruited in your Zones.

Machines

Usage: Machines are used for construction of more advanced Assets and Troop Types.

Production: Is produced by Heavy Industries.

Hi-Tech Parts

Usage: Hi-Tech Parts are used for construction of more advanced Assets and Troop Types.

Production: Is produced by Hi-Tech Industries.

Radioactives

Usage: Radioactives are used to fuel Nuclear Plants and to produce Atomic Weapons or fuel Fusion Engines.

Production: Is produced by Radioactives Mines.

Energy

Usage: Energy is used by more advanced Assets as well as some advanced Troop Types.

Production: Energy will have to be produced in Power Plants or by Solar Panels.

5.5.4.2. ASSETS' ITEM USAGE

Here follows a list of all Assets you can construct.

Most Assets use a small amount of Energy and some Workers as Input.

To keep the list readable, these two inputs are only specified in the list below if the quantity needed is really high.

ASSET TYPE	CONSTRUCTION COST	INPUT	OUTPUT
Farming	Metal + IP	Water	Food
Mining	Metal + IP		Metal Rare Radioactives Fuel Water
Recycling	Metal + IP		Metal Rare Radioactives Fuel Artefacts
Industry	Metal + IP		IP
Heavy Industry	Metal + IP	Energy Metal	Machines
Power Plant	Metal + IP	Fuel	Energy
Hydroponics	Metal + IP	Water Energy	Food
Truck Station	Metal + IP	Fuel	Logistical Points
Supply Base	Metal + IP		Logistical Extension
Wind Traps	Metal + IP		Water
H20 Purification	Metal + IP		Water
Bio-Fuel Ref.	Metal + IP	Food	Fuel
Synthetic Fuel Refinery	Metal + IP	Energy	Fuel
Solar Panels	Rare Metals + IP		Energy
Power Banks	Rare Metals + IP		Storage Points
High Command (From Bunker to Palace)	Metal + IP		BP PP
University Hospital Barracks Vidcom Station	Metal + IP		Quality of Life Score Points
Ammo Depot Fuel Depot Food Silo Water Reservoir	Metal + IP		Storage Points
Serpentization	Metal + IP	Water	Energy
Methane Synth.	Metal + IP	Energy	Fuel
Deep Core Gas	Metal + IP		Fuel
Atmospheric H20 synthesis	Metal + IP	Energy	Water
Rock dehydrate	Metal + IP		Water
Soil Demetalization	Metal + IP		Metal Rare Radioactive
Volcanic Energy	Metal + IP	Water	Energy
Rail Station	Metal + IP + Machines	Fuel	Logistical Points
High Speed Rail Station	Metal + IP + Machines + Hi-Tech	Energy	Logistical Points
Nuclear Plant	Metal + IP + Rare Metals	Radioactives	Energy
Rad.Cleansing	Metal + IP + Rare Metals		Remove RAD from Hexes
Hi-Tech Industry	Metal + IP + Machines	Energy Rare Metal	Hi-Tech Parts
Bureaucrat Off.	Metal + IP		BP

5.5.4.3. FOOD ASSET TYPES

The following Assets produce the following Food at ideal circumstances at level I.

ASSET TYPE LEVEL I	INPUT	OUTPUT
Open Farming	1,000 Water	200 Food
Domed Farming	200 Water 10 Energy	200 Food
Hydroponic Farming	50 Water 100 Energy	200 Food

Keep in mind that Open Farming can benefit from "Areal Rules" and Domed/Hydroponic Farming is protected from all kinds of hazards.

5.5.4.4. MINING ASSET TYPES

The following mines produce the following at level I, when mining is easy and plenty of reserves still in the ground.

ASSET TYPE LEVEL I	INPUT	OUTPUT
Metal Mine		250 Metal
Rare Metals Mine		100 Rare Metals
Recycling Facility		30 Fuel 40 Metal 5 Rare Metals
Oil Drilling		500 Fuel
Bio Fuel Refinery	300 Food	200 Fuel
Synthetic Fuel Ref.	200 Energy	250 Fuel
Ice Mining		1,000 Water
Wind Traps		200 Water
Water Purification		2,000 Water
Methane Synthesis Plant	200 Energy	250 Fuel*
Deep Core Gas Extractor		125 Fuel**
Atmospheric H20 synthesis	200 Energy	500 Water
Rock Dehydration Plant		250 Water
Soil Demetalization		125 Metal
Radioactives Mine		5 Radioactives

*=Production depends on Methane (CH4) ppm in the atmosphere. Only possible above 250ppm

**=Production depends on the age of the Planet. The thinner the planetary crust the more production. Not possible on geologically dead Planets.

5.5.4.5. ENERGY ASSET TYPES

The following Assets produce the following amounts of Energy at level 1.

ASSET TYPE LEVEL I	INPUT	OUTPUT
Power Plant	500 Fuel	500 Energy
Solar Panel	-	75 Energy*
Volcanic Energy Plant	200 Water	600 Energy
Serpentization Plant	200 Water	250 Energy
Gravitonic Collector	-	500 Energy
Nuclear Plant	1 Radioactives	500 Energy (Fusion Tech doubles this)

*=Production depends on Solar Irradiance. Above the Earth baseline of 1367 W/m2 more output, below less output.

5.5.4.6. MODEL COSTS

Here follows a list of all base and variant costs for constructing Models.

MODEL / PART	CONSTRUCT COST	OPERATIONAL COST
Automated Models	High Tech	Energy
Non-Automated Models	Recruits	Food
Walkers	Machines	-
Carbine, Gas, Gauss Rifles / MG + RPG	Metal IP	Ammo
Laser Rifles / Laser MG	Rare IP	Energy
Plasma Rifles / Plasma MG	High Tech IP	Energy
Nuke RPG	Machines Metal IP	Radioactives
Personal Armor	Metal IP	-
Powered Personal Armor (Battledress)	Machines Metal IP	-
Personal Shielding	High Tech Radioactives IP	-
Howitzers and High Velocity (HV) Guns	Metal IP	Ammo
Laser Guns	Rare IP	Energy
Beam Guns	Rare High Tech IP	Energy

Plasma Guns	High Tech IP	Energy
Rockets	Metal IP	Ammo
Missiles	Metal Machines	Ammo
Nuclear Weapons	Metal Machines IP	Radioactives
Steel Plating	Metal IP	-
Polymer Plating	Rare IP	-
Liquid Armor	Metal High Tech IP	-
Shield Generator	Metal Machines High Tech	Energy
Diesel Engine	Metal IP	Fuel
Electric Engine	Rare Machines IP	Energy
Nuclear Engine	High-Tech Radioactives IP	-

5.6. REGIMES

You play one of the Regimes on the map. Think of a Regime as anything that signifies an at least somewhat coherent force occupying a certain number of Zones or Hexes.

5.6.1. TYPES OF REGIMES

There are different kinds of Regime Types.

5.6.1.1. MAJOR REGIMES

Are the Regimes that can be played by humans and are the ones that have access to the fullest range of features. You start the game at peace with all Major Regimes. Note that there are different relation Statuses with Majors while you are at peace.

5.6.1.2. MINOR REGIMES

Are (semi) organized geographical entities. They are always under AI control. Limited diplomacy with them is possible.

Unclear Relation

You start out with an Unclear relation with all Minors. In order to take their Cities or attack their Units you'll need to go to war with them. Taking Hexes they claim to hold is however possible while in this Unclear relation. Unclear relation is unique to Minor Regimes.

However, keep in mind that your relation will decrease with the Minor in question if you take its territory and approach on its City and/or Units.

If the Relation is lower than 35 the Minor might also infringe on your territory given the "Unclear" relations. If the Relation is higher than 35, the Minor will not try to "steal" your Hexes.

Also keep in mind that, in the confusion over the borders with an "Unclear" relation, you could accidentally walk into an Ambush if you advance on a Hex where there are hidden Units of the other Regime. Such fighting will be considered an accident and will not lead to war.

Peace with a Minor

If you make Peace with a Minor you'll no longer be able to take its Hexes. The relation will have become clear and you'll have to respects the territorial claims of the Minor in question.

5.6.1.3. NON-ALIGNED FORCES

These are forces that are unorganized and that function on a Unit-to-Unit basis. No diplomacy is possible, and they are always considered hostile.

These forces include Free Folk Militias and native Alien Lifeforms.

5.6.1.4. REBEL REGIMES

These are always linked to a specific Major Regime with whom they have a special hatred relation. They'll however follow any diplomatic changes which the Major Regime they are rebelling against is making. If Rebels succeed in conquering a City they'll make it the Capital of a new regular Minor Regime.

5.6.2. YOUR REGIME

You Regime is always a Major Regime.

Basically, every game piece or stat that is not at Unit or Zone level is at Regime Level. Your Regime represents you and your (either big or small) bureaucracy controlling your territories and subjects.

There are several Regime level points that you can spend to make your power felt.

5.6.2.1. FATE POINTS (FP)

This abstracts your personal interventions and your twisting of the fate of your empire. They can be used to play Fate Stratagems. Those and these points can be acquired by conquering Zones (minimal 10,000 Populace) and by gaining new Tech, Culture or Admin levels. Furthermore, you'll get a point and free Stratagem pack for free at the start of a new game.

5.6.2.2. POLITICAL POINTS (PP)

This is the most vital resource you have. It is used to play Stratagems, make personnel changes, upgrade cities, raise new Units and HQs. You will have more PP if you get more powerful, but your PP will always be highly limited. Be sure not to suffer Prestige Damage, as this can seriously reduce your PP income.

Your PP income for a turn is as follows:

PP INCOME TYPE	CALCULATION
Base Income	5- 10 PP (based on difficulty level)
PP production by Organizations	Square Root of ppPoints
Prestige Damage	Prestige Damage % is removed.
Political Bonus	PP is increased by Political Bonus %.
Multiple SHQ Penalty	2 or more points can be deducted, starting then you have more than 1 SHQ.

5.6.2.3. SHQ POLITICAL POINT COST

SHQs are major activities of bureaucracy and political clout. Your first SHQ does not cost you any PP per turn, however any subsequent SHQs you build will. You will be at your most efficient if you only have one SHQ.

NUMBER OF SHQS	PP PENALTY PER TURN
1	none
2	-2
3	-5
4	-9
5	-14
6	-20

5.6.2.4. PRESTIGE DAMAGE

Prestige models your overall respectability and it can take a hit from your subjects' disapproval if you show signs of "geopolitical madness," like invading another Regime you actually have an alliance or a really positive relation with.

Prestige Damage, once taken, will only very slowly erode. You'll lose 1% each round.

5.6.2.5. BUREAUCRATIC POINTS (BP)

These are generated by some of your more governmentally-oriented Assets. You can disperse them over your Organizations by setting the National Budget. Inside the Organizations they can be used to Research, make Stratagems and be put to good use on a big number of other Tasks.

The BP points displayed on your dashboard are the points that were produced this turn and which will be distributed the upcoming turn.

The Nature of Bureaucracies

Bureaucracy has at the same time an undeserved and a deserved negative image. Undeserved because grouping large number of people in huge Organizations actually allows you to undertake big tasks and have a serious impact, deserved because the bigger your bureaucracy gets the less efficient it will be. Keep in mind though that small bureaucracies can be extremely effective.

SIZE OF BUREAUCRACY	SMALL SIZE BONUS BP GIVEN	BIG SIZE PENALTY BP SUSTAINED
10 BP	+27	-
100 BP	+100	-
200 BP	+59	-
300 BP	+27	-
400 BP	+0	-
1,000 BP	-	-12
2,000 BP	-	-190
3,000 BP	-	-560
10,000 BP	-	-5,300
50,000 BP	-	-40,000

5.6.2.6. CREDITS (CR)

You use Credits to pay Leaders, Workers, recruit Soldiers and Colonists, Trade and optionally to do Diplomacy by making Gifts.

Salaries and Signup premiums for Workers, Soldiers and Colonists are set in milliCredits (1 milliCredit = 0.001 Credit)

Salaries of Leaders and Investment budgets are set in full Credits.

5.6.2.7. LEVELS

Your Regime has 3 key levels that impact up to which level Assets you can build.

Tech Level

Determines the maximum level to which you can upgrade productive/economic Assets like farms and factories.

It also limits which Tech Groups you are able to make discoveries in.

This is based on the amount of research you have done. Your Tech Level is the square root of the number of Techs you have researched.

Also provides a Technical Skill Family increase for newly recruited Leaders.

So in a normal game you start with 9 techs already available at start, meaning normally you start at Tech Level 3.

Maximum Tech Level is 10.

Admin Level

Determines the maximum level to which you can upgrade organizational Assets (aka as government Assets).

Also provides a Command Skill Family increase for new Leaders.

This is based on the number of Organizations you have created and your total BP production. Your Admin Level is the square root of (the number of councils + the square root of your BP production).

So for example 100 BP production add 3 Admin Levels, where 400 BP adds 4 Admin Levels and 1,000 BP adds 5 Admin Levels, 10,000 BP adds 10 Admin Levels. 1 Organization adds 1 Admin Level, 4 Organizations add 2 Admin Levels, 9 Organizations add 3 Admin Levels.

Maximum Level is 10.

Civilisation Level

Determines the maximum level you can upgrade QOL Assets to.

Also provides an Interpersonal Skill Family increase for new Leaders.

This is based on the square root of the average Civilisation Score of your Regular Zones and diminished by 1.

Maximum Level is 10.

5.6.2.8. WORD

Your Word Score models if you keep your promises. If it gets low your promises will not be trusted by your Leaders and other Regimes.

- It impacts your Relation with a Leader if you relieve him/her from a Job with the promise of a better one. If Word is low the Leader won't believe your promise.
- Factions take your promises on their Demands more serious with more Word.
- Impacts Faction Ideal Relation.
- Impacts Leader Ideal Relation for Leaders with high Heroic or Low Ambition stats.
- Impacts a number of diplomatic Stratagems as well.

5.6.2.9. CAPITAL

If you have multiple Zones, one of those Zones will have your Capital City.

It is the City were you and your Cabinet reside. Losing it during battle will cause your Cabinet members to be decimated during the fighting.

If you lose your Capital, it will shift to another Zone (if one is still available of course).

High Command Asset

Of these you are supposed to have just one. It is your personal command centre and it can only be present in your Capital City. So, if any is found in a non-Capital Zone, it will be immediately morphed into the more generic Offices Asset.

5.6.2.10. POPULARITY

This a Regime-wide score based on many Zone, Leader and Unit statistics.

It helps you to avoid Unrest events even in Zones where conditions are miserable.

It also helps you defend against aggressive special operations Stratagems that could be used by your enemies.

Calculation is:

- Happiness of Workers
- Happiness and Loyalty of Population
- Morale of Soldiers
- Relation and Loyalty of Leaders

The first three parts of the calculation are weighted for the amounts of Workers, Population and Soldiers actually present in your Regime.

5.6.3. DECISIONS

On most turns you'll be asked to make Decisions.

If you end your turn without making one, it will either return the next turn (especially if about your own government Organization and Tasks) or it can be made in your name by your Secretary or Governor.

5.6.3.1. TYPE OF DECISIONS

Governmental Decisions

These are Decisions that are standard and not politically sensitive. Your decisions here will not change the Profile of your Regime, nor affect your Leaders (unless it deals with appointments or policy speeches).

Nominations

These are proposed by your Bureaucracy and all Factions have a hand in who is going to be proposed. If you do not have many Leaders in reserve then you'll always be able to pick who you want.

It is not common to do so, but it is possible for you to 'Dismiss' a candidate and then another one will be proposed to you. However, if this concerns a Faction member, it will decrease the Happiness of his/her Faction. Once a Leader has been dismissed once it will usually take some while before your nomination committees dare to propose him/her again.

Instead of dismissing a Leader, it might be cheaper to wait a turn to see if different Leaders are proposed for the job in question the next turn.

Event Decisions

A special type of decision is the event-based decision that obliges you to always pay 1 PP for making a Decision yourself. Not making the Decision yourself will save you that 1 PP.

Promises

During some events you'll be able to make a Promise. A Promise is much like an accepted Demand, but it is not linked to a specific Faction.

If you successfully deliver a Promise:

- You receive 20 PP
- Your Word score increases by +10%

If you fail to deliver a Promise:

- Your Word score decreases by -20%

Demands

Factions can make Demands on you. Consider carefully if you want to accept a Demand.

If you successfully deliver on a Demand:

- You get a Profile increase on the Profile that concerns the Demand of +20%.
- You get big boost of +30% to the Happiness of the Faction that took the initiative.
- Your Word score increases by +10%.

If you promised to deliver on a Demand, but you fail to actually deliver:

- You get a Profile decrease on the Profile that concerns the Demand of -20%.
- You get big loss of -30% to the Happiness of the Faction that took the initiative for that Demand.
- Your Word score decreases by -20%.

If you refuse a Demand when it is made:

- You get a decrease on the Profile that concerns the Demand of -10%.
- You get a loss of -15% to the Happiness of the Faction that took the initiative.

If you accept a Demand when it is made:

- Faction Happiness goes up with +10% modified with your Word level.

5.6.3.2. COST OF DECISIONS

Most event-based non-organizational Decisions costs at least 1 PP for making a Decision yourself.

5.6.3.3. DECISIONS MADE IN YOUR NAME

If you press End Turn without having made a Decision, your Secretary, Governor or Director will make the Decision for you. Usually your subject will pick the safest course of action. But if the Leader making the Decision for you has low Relation and high Authority score, a decision most favourable to the Profile of the Leader might be reached instead.

Especially keep an eye on the Secretary. He/she makes a lot of Decisions if you do not make them.

5.6.4. ORGANIZATIONS

You start the game with only one Organization, but you can construct more at a cost in Political Points (PP).

Each Organization can execute a number of different Tasks.

An Organization always performs better if it has a Leader assigned as its Director. Depending on your Relation with the Director the impact of the BP allocated will be increased. It can be increased by +50% if your Relation Score with the Director is at the maximum of 100 points.

The Organizations represent the different pillars of your government. Each Organization can be assigned a part of the national Bureaucratic Point (BP) budget. Furthermore, all Organizations have their own Organization Budget for prioritizing between different Tasks that they can spend their BP (received from the National Budget) on. Call your Director to discuss his/her Organization Budget.

Let's take a look first at which Organizations you can create.

5.6.4.1. ORGANIZATIONS

Supreme Command Council

This is your initial Organization. It represents your personal administration and is, for example, the place where you can imagine you have your personal offices and where your Secretary is being housed.

It is a very general-purpose Organization that is your only sure source of PP income and also allows you to have some Stratagems at your disposal in the early game. Keep in mind that any Stratagem produced by your Supreme Command Council can be produced more efficiently at a more specialized Organizations.

Military Research Council

This is an organization dedicated to researching new Techs that are of interest to the military. This Organization can perform the Tasks below.

Discovery Task

Before a Tech can be researched you first need to find the idea. This Task focuses the effort of finding new ideas.

It is always a mystery how much BP you'll need to invest before you make a Discovery. Except when you have discovered everything there is to discover, in that case you'll be notified.

Skill used is Inventor.

Research Task

Once you have discovered a Tech you can order the Organization to research it.

Skill used is Science.

Economic Council

This is an organization dedicated to researching new Techs that are of interest to your Populace and your Economy. This Organization can perform the Tasks below.

Discovery Task

Before a Tech can be researched you first need to find the idea. This Task focuses the effort of finding new ideas.

Skill used is Inventor.

It is always a mystery how much BP you'll need to invest before you make a Discovery. Except when you have discovered everything there is to discover, in that case you'll be notified

Research Task

Once you have discovered a Tech you can order the Organization to research it.

Skill used is Science.

Prospecting

This will attempt to increase the Prospecting Level in your Zones with the lowest level of Prospecting.

Skill used is Prospecting.

Economic Policies

This Task will provide you with special Stratagems that will allow you to improve your Economy.

Skill used is Administration.

Model Design Council

This is an organization dedicated to developing new Equipment for your military. This Organization can perform the Tasks below.

Discover Model

Before a Model can be developed you first need to find the idea. This Task focuses the effort of finding new ideas.

Skill used is Technician.

It is always a mystery how much BP you'll need to invest before you make a Discovery. Except when you have discovered everything there is to discover, in that case you'll be notified

Design Model

Once you have discovered a Model you can order the Organization to develop it.

It is possible to continue development on an already developed Model as well. Like improving the Mark II tank to the Mark III tank.

Usually there are several rough design choices you are permitted to communicate to the design team of the Model.

Skill used is Technician.

Staff Council

This is an organization dedicated to the high-level organization and management of your military.

This Organization can perform the Tasks below.

Customize Formation Type

This task will generate Customization Points. These points can be spent by calling the directors of the Staff Council and customizing a Formation Type with him/her.

Discover Formation Types

Before a Formation Type can be Operationalized you first need to find the idea for it. This Task focuses the effort of finding new ideas.

It is always a mystery how much BP you'll need to invest before you make a Discovery. Except when you have discovered everything there is to discover, in that case you'll be notified

Skill used is High Command.

Operationalize Formation Types

Once you have discovered a Formation Type you can order the Organization to operationalize it.

Skill used is High Command.

Occupation and Governance

This Task will provide you with special Stratagems that will allow your military forces to help "stabilize" certain Zones. Includes Stratagems as Pillage and Razia. Make sure that you have the Profile that allows these Stratagems to be generated.

Skill used is High Command.

Postures

This Task will provide you with Posture Stratagems that can be played on military HQs. Postures are basically doctrines of how to engage (or not) the enemy. They can provide big bonuses and penalties to combat and when well used can prove a powerful tool in defeating your enemies.

Skill used is High Command.

Secret Service Council

This is an organization dedicated to clandestine operations behind enemy lines. Often far behind. They train spies and coordinate covert operations. This Organization can perform the Tasks below.

Active Field Operations

This Task will provide you with a wide variety of Stratagems that allow you to use covert operatives to undermine enemy Regimes.

Skill used is Covert Ops.

Spying Operations

This Task will provide you with Spy Stratagems that you can play on enemy Zones. This is the way to gather intelligence far beyond your borders.

Skill used is Covert Ops.

Internal Security

This Task will provide you with Stratagems that turn the attention of the Secret Service on your own people. Stratagems like Investigate Leader.

Skill used is Covert Ops.

Foreign Affairs Council

This is an Organization dedicated to improving or changing the relations you have with your neighbouring Regimes.

Major Diplomacy

This Task will provide you with a wide variety of Stratagems that allow you to engage in diplomacy with Major Regimes. Skill used is Diplomacy.

Minor Diplomacy

This Task will provide you with a wide variety of Stratagems that allow you to engage in diplomacy with Minor Regimes. Skill used is Diplomacy.

Applied Science Council

This Organization is dedicating to improving upon (binary) technologies you have already mastered. They only have access to Linear Techs.

At start these Techs are easy to research, but the higher the level you reach the harder it will become to make further improvements.

Discovery Task

Before a Linear Tech can be researched you first need to find the idea. This Task focuses the effort of finding new ideas.

It is always a mystery how much BP you'll need to invest before you make a Discovery. Except when you have discovered everything there is to discover, in that case you'll be notified.

Skill used is Inventor.

Research Task

Once you have discovered a Linear Tech you can order the Organization to gain research points on it. Skill used is Science.

Interior Council

This is an Organization dedicated to improving the functioning of your Regime. It has Tasks that can provide you with Stratagems to get more Income and to have more Leaders to do your bidding.

Taxation

This Task will provide you with Stratagems that allow you to change the taxation of your Regime.

Income and Sales Tax can be changed on a Regime wide level.

Skill used is Administration.

Tariffs

This Task will provide you with Stratagems that allow you to change the tariffs on exports and imports with other Regimes. You can set a different Tariff for each Regime.

Skill used is Administration.

Human Resource

This Task will provide you with Stratagems to recruit new Leaders.

Skill used is Administration.

Interior Policies

This Task will provide you with Stratagems that focus on making improvements to Zones.

Skill used is Administration.

5.6.4.2. BONUSES FOR TASKS

Some Tasks can receive Bonuses. These bonuses will increase the impact BP invested in the Task will have.

Director Relation Bonus

If your Organization is missing a Director, you'll suffer a -50% penalty. Once you have a Director in place with a Relation >50 you'll start receiving a bonus. A Director with a Relation <50 gives penalties between -1% and -50%. So, a Relation of 90 will give a 40% bonus on BP invested.

Director Skill Bonus

If the Skill Roll of the Director is above 100, the value above 100 will be used as a positive percentage modifier. So, a roll of 123 will give a 23% bonus on BP invested.

Design Bonus

This Bonus makes the Design Model Task of the Model Design Council more effective.

Research Bonus

This Bonus makes the Research Technology Task of the Military Research, Economic and Applied Sciences Councils more effective.

5.6.4.3. NEW ORGANIZATION COST

Your first Organization is very cheap. Subsequent Organizations will become more expensive to put in place.

This models that it is easy to start-up your bureaucracy and start creating Organizations. However, every new Organization you add to your government apparatus will become more expensive as the total number of links between all your Organizations continue to increase and make life more complex from an organizational point of view. Or in other words, with increased complexity overhead increases.

ORGANIZATION NUMBER	BASE COST	LOWEST COST POSSIBLE
2nd	4 PP	1 PP
3rd	8 PP	2 PP
4th	16 PP	4 PP
5th	28 PP	6 PP
6th	44 PP	9 PP
7th	52 PP	11 PP
8th	56 PP	11 PP
9th or more	60 PP	12 PP

Decrease of cost with time

If you wait a turn, the PP cost for a new Organization will be decreased by 3%. A maximum reduction of 80% is possible. This models the stress cost of rapidly expanding your bureaucracy complexity versus taking the time to do it more organically.

Delays with creation

Keep in mind there are some delays before you'll have an Organization in place that is functioning as it should be. If you create an Organization in turn X, it will be immediately created by your staff. Then in turn X+1 when the Organization has been equipped with cadres and presumably some offices, communication lines and a budget you'll be able to appoint its Director. The Director will need to settle in and take charge of his/her Organization and you can then call this Director in turn X+2 to reset the Organization Budget.

Diminishing results with more BP investment

Your BP invested in Tasks at your Organizations has a non-linear effect. The more BP you spent the less effective each BP will be.

This limit is set at 100BP for a Task. Above a 100BP investment, you'll suffer inefficiency effects.

For example, investing 150 BP in a Task results in an effective investment (after limiting returns rule) of 127 BP. And an investment of 300 BP results in an effective investment of 190 BP. So it can be worthwhile to invest beyond the limit, but it is not the most efficient way to spent your BP.

If your bureaucracy gets really big and you have 1,000s of BP to spend, inefficiency at Task level is something you'll have to learn to live with. If you are a small fry and have only up to a few hundred BPs in total, do not worry about this rule.

5.6.4.4. ORGANIZATION MANAGEMENT

You have several means to provide high level management to your Organizations.

New Organization

Sometimes your Secretary will prompt you so see whether you want to create a new Organization on his/her own initiative. However, if you want

to take the initiative yourself, you'll need to Call your Secretary to ask him to prepare this Decision immediately.

National Budget

If you have more than one Organization, then every so many turns the National Budget will be discussed. It concerns the distribution of BP over your Organizations. You can also Call your Secretary to ask him to prepare this Decision immediately.

Keep in mind that reshuffling your budget can affect your Relation with your Council Directors. Almost nobody likes a budget cut!

Organization Budget

Organizations have multiple Tasks over which they distribute the BP that have been allocated to them by the National Budget. If you want, you can change these allocations. You can do so by placing a Call to a Director to ask him/her to prepare this Decision immediately.

Change Target

A number of Organizations have Tasks that have a specific target. Like researching a specific Tech, developing a specific Model or operationalizing a specific Formation Type. You can Call your Director to ask him to prepare this Decision immediately.

Changing Director

Once an Organization has a vacant Director position, the next turn a Director selection Decision will be prepared by you. You can force a vacant position by making a Call to the current Director to Dismiss him. If you do so next turn you'll be able to choose a new Director. There is a one turn delay here because organizing a committee to find you nominees takes some time. This delay will expose you to the -50% penalty of having no Director, for one turn. Meddling like that in Organizations always comes at some costs.

Nominations

At the start of each turn you'll receive Nominations for taking up vacant positions.

It is important to realise that it is your bureaucratic apparatus that chooses the nominees. Depending on your Political System certain candidates will be preferred due to your Factions' influences.

Taken into account for selection is the suitability for the post, Capability Level, Seniority, Faction membership and if there are Leaders that have a Job promised by you.

If you do not like any of the Nominations, you can choose to leave a post vacant for another turn and hope for some better nominees the next turn. There is a heavy randomized part to the nominations, so it is certainly possible to get different nominees the next turn.

5.6.5. ADVISORS

If an Advisor is attached to a Leader and the Advisor makes a higher Roll, it is the Advisor's Roll result which will be used instead of the Roll result of the Leader the Advisor is attached too.

Advisors can cause friction with the Leader they are attached to due to differences of personality and ethics.

Advisors are directly subject to you. They can be attached or detached to any Commander, Governor or Director.

The maximum number of Advisors that you can appoint is equal to the square root of the number of Zones you own (result rounded down).

ZONES	ADVISORS
1-3	1
4-8	2
9-15	3
16-24	4
25+	5

Advisors are always cabinet members, so there is a price to pay for the fact that they gain a Cabinet position. The more noses in your Cabinet, the harder it is to make them point in the same direction.

5.6.6. BONUS POINTS AND BONUSES

There are many kinds of Bonuses that your Regime can acquire.

At the very start of your turn, your Bonus Points (generated previous turn) and your Regime Feats determine your Bonuses for the current turn.

During production you can acquire Bonus Points that will be used next turn.

The Bonus Points translate in a square root addition to Bonus, meaning that 10 Bonus Points give you an additional 3% Bonus and 100 Bonus Points give you 10% additional Bonus.

5.6.7. STRATAGEM GENERATION AND PP COSTS

Stratagems that can be generated by an Organization have a certain BP cost that needs to be paid for for it to be actually generated.

Your Regime will start out with only the Supreme Command Council in place that will generate a limited number of Stratagems, but over time you'll create more Organizations and will acquire more diversity in Stratagems.

The PP cost of your Stratagems is dependent on your Relation with the Leader who'll execute the Stratagem. If Relation is higher than 50 you will have to pay less PP, if Relation is below 50 you'll have more PP.

The absence of a Leader for the Organization that executes the Stratagem increases the PP cost to the max. Some Stratagems can also be executed by the Supreme Council as well as a more specialized Council. Using the Supreme Council to execute these Stratagems also increases the PP cost.

If you already have a certain number of specific Stratagems, the chance to get another one will be diminished sharply.

5.6.8. LEADER RESERVE POOL

Your Regime will have a number of Leaders employed. Some of them will be your Zone Governors, others your Organization Directors and yet others your Army Commanders. And some will not have any assignment at all. They'll be placed in the Reserve Pool.

It is this Reserve Pool that is used to provide you with Nominations for filling vacant posts.

Be aware that it is possible for discontented Leaders to leave you or to rebel. Rebellion is not very likely, and it is unusual for any rebellion from a Reserve Pool Leader to be strongly supported, but if you place a dissatisfied high Seniority Ranking Leader in the Officer Reserve Pool this could occur.

5.6.9. THE REGIME PROFILE

Your Regime has a Profile consisting of 3 Profile Groups. Each Profile Group contains 3 interlocking Profile scores.

Consider the Regime Profile scores like the state of mind of all your Populace, Leaders, Soldiers and Workers.

The Regime Profile scores can change based on your Decisions. However, they get harder to change once they get into the extreme ends of their spectra.

Reaching an absolute 0 or 100 score on a Regime Profile score should be almost impossible. Even getting below 10 or above 90 will be extremely difficult. This represents the natural resistance of people to take very extreme positions.

Having a Regime Profile score above 40 will eventually result in gaining your first Regime Feat. Above 50 you'll receive a second, above 60 a third, etc.

5.6.9.1. CHANGES TO YOUR REGIME PROFILE

There are several mechanisms that can make your Regime Profile change.

Decisions

Most Decisions you make will have an impact on your Regime Profile. Keep in mind that the higher a Profile Score is, the lower the gain and the higher the loss will be that a Decision offers.

Going to War

Invading another Regime will have a repercussion on your Fist Profile.

This effect is lower when it concerns going to war with Minors or Regimes that you have a low Relation with. This effect is much higher when it concerns Majors, especially those with whom you have a high Relation level. This effect is truly humongous when you are committing a kind of treason, like going to war with a Regime with whom you have a pact (like non-aggression pact).

Dominant Profiles

All Profiles are Dominant over one other. Dominant Profiles decrease the scores of the other Profile and these rules ensure that you cannot get top scores on all Profiles. Getting a high score on one Profile, will mean getting a lower score on another Profile.

For example, Autocracy has dominance over Meritocracy. This means that the dominated Profile can in the long term not retain a score higher than 100 minus the Dominant Profile. So, if Autocracy has a score of 70 points, that means Meritocracy will be pushed back to a maximum score of 30 points.

This suppression effect is gradual and is minimally 1 point per turn and maximally 20% of the difference in points.

The Profile that is doing the suppressing also takes a hit in the process at half the damage done to the Profile it is suppressing. This models the cost of infighting and contradictory ideologies.

Dominant Profiles List

Democracy suppresses Autocracy
Autocracy suppresses Meritocracy
Meritocracy suppresses Democracy

Enforcement suppresses Commerce
Commerce suppresses Government
Government suppresses Enforcement

Fist suppresses Mind
Mind suppresses Heart
Heart suppresses Fist

Dominant Profiles also take half the damage themselves every time they suppress another Profile.

5.6.10. PROFILE GROUPS AND FIELDS

The Profiles have been organized into 3 Profile Groups. Each Profile Group has 3 Profiles.

5.6.10.1. POLITICS GROUP

These 3 Profiles determine how your people think the nation should be governed.



Democracy

Democracy denotes your people's preference for the making of democratic decisions. It denotes the belief that all men are equal and if possible have an equal vote.



Autocracy
Autocracy denotes adherence to principles of natural leadership and might making right.



Meritocracy
Meritocracy denotes that your nation strives to get the best people to the highest positions.

5.6.10.2. SOCIETY GROUP

These 3 Profiles determines the way your people think that they should be managed.



Enforcement
Enforcement denotes the level of discipline and rigid rules inside your nation.



Commerce
Commerce denotes the level of private initiative inside your nation.



Government
Government denotes the power which the government and its bureaucrats wield.

The higher your Government Profile the more likely it is your Population will put up with higher taxation levels.

5.6.10.3. PSYCHOLOGY GROUP

These 3 Profiles determines the way your people think, feel and act.



Fist
Fist denotes a people that want to win and who won't hesitate for a moment to use force to achieve their goals.



Mind
Mind denotes a people that are cerebral and that like to think, have some morals and like to be creative.



Heart
Heart denotes a people who have faith and belief in each other and their joint struggle.

5.6.11. REGIME FEATS

A Regime Feat is a special institution or ideology well established inside your Regime. These Regime Feats provide you positive effects in bonuses, Stratagem unlocks and Unit Feats.

They'll also provide special Faction Stratagems when there is a Faction that is happy and that shares a Profile with the Regime Feat in question.

All the Regime Profile scores give you the chance to gain Regime Feats once they go beyond 40 points.

5.6.11.1. REGIME FEATS LISTING

Democracy

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Engaged Politicians	Political Bonus +40%	Political Aid Truck	
50	Conflict Resolution	QOL Bonus +50%		Negotiator
60	Open Politics	Political Bonus +60%	Local Referendum	
70	Due Procedure	QOL Bonus +100%		Secondant
80	Civil Society	Political Bonus +80%	Civil Delegation	
90	Voters First	QOL Bonus +150%		

Autocracy

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Strength of the Will	-none-		Bunker Busters
50	Submission	-none-	Hero of the Nation	
60	Martial Law	-none-	Crackdown on Unrest	
70	Reign of Fear	-none-		Firing Squad
80	Burned Earth	-none-		
90	Total Power	-none-		

Meritocracy

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Accomplished Envoys	Diplomacy Rolls +30	Plea of Friendship	
50	Capable Supervisors	Per 1,000 pop/work +1 Food	Worker Privileges	
60	Martial Tournaments	Operational Commands Rolls +25		Champion
70	Administrative Competence	Administration Rolls +40		Tough NCO
80	Capable Small Business	Per 1,000 pop +2 Credits		
90	Competitive Culture	Leader Capability +50%		

Enforcement

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Discipline	(Service) Tax Bonus +50%		Military Police
50	Efficiency Goals	Logistical Bonus +50%	All for the Front	
60	Strong-arming	Recruitment Bonus +100% (Soldier/ Colonists)		Elite Trainer
70	Citizen Loyalty Oath	(Service) Tax Bonus +100%	Sacred Oath	
80	Stick to the Schedule	Logistical Bonus +100%		
90	Subjects of the State	Recruitment Bonus +200%		

Commerce

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Free Market	Private Economy Bonus +40%	Commercial Project	
50	Opportunism	Pop Happiness Bonus +50%		Scavengers
60	Wealthy Friends	Commerce Bonus +100%*	Investor backing	
70	Corporations	Private Economy Bonus +80%		Corporatist Officer
80	Private Careers	Pop Happiness Bonus +100%	Co-optation	
90	Stock Market	Commerce Bonus +200%*		Appropriation Team

*=Commerce Bonus allows your Traders to outwit other Traders when trading with them, resulting in them buying cheap and selling high. Furthermore the higher your Commerce Bonus the lower their margin (the higher their buy price will be) when dealing with you.

Government

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Bureaucracy	Bureaucratic Bonus +40%		Medical Team
50	State Companies	Public Industrial Bonus +40%	Double Shift	
60	Workers Rights	Worker Happiness Bonus +50%		Field Kitchen
70	Central Computer	Bureaucratic Bonus +60%	Administrative Review	
80	Intensive Worker Training	Public Industrial Bonus +60%		
90	Worker Elite	Worker Happiness Bonus +100%		

Fist

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Voluntarism	Chance on extra Militia Units.	Militia Project	
50	War Lust	50% higher casualty tolerance		People's Hero
60	Esprit de Corps	Combat Bonus +25%	Insult	
70	Militarized Politics	100% higher casualty tolerance	Political Lieutenant	
80	Fanaticism	Combat Bonus +40%		Suicide Bomber
90	Total War Mentality	200% higher casualty tolerance		

Mind

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	Technology Fascination	Research Bonus +30%		Techno Mage
50	Curiosity	Cultural Adjustment Bonus +40%	Zoo/Cultural Project	
60	Logical Thought	Research Bonus +40%		Engineer
70	Universal Truth	Cultural Adjustment Bonus +60%		Roboteer
80	Scientific Religion	Research Bonus +50%	Breakthrough Now!	
90	Academic Mentality	Cultural Adjustment Bonus +80%		

Heart

PROFILE SCORE	FEAT NAME	BASE EFFECT	FACTION CARDS	UNIT FEAT
40	National Pride	Morale Bonus +40%	Militant Propagandist	
50	Friendship	Leader Loyalty Bonus +40%		Musical Band
60	Joint Struggle	People Loyalty Bonus +50%	Popular Rally	
70	Rallying Flag	Morale Bonus +60%		Flag Bearer
80	Band of Brothers	Leader Loyalty Bonus +80%		Camo Team
90	Total Trust in Leaders	People Loyalty Bonus +100%		

Losing Regime Feats

If your Profile score drops 10 points below the Profile score needed to gain the Regime Feat, you'll start to have a chance to lose the Regime Feat in question.

5.6.12. POLITICS

Even if you wield almost total power (Autocracy/Politburo) there will still be some politics going on.

You always have a Political Body active. This is either a Parliament, a Senate or a Politburo.

If you have a Parliament, normally all classes (Population, Workers, Soldiers and Leaders) are allowed to vote, but under special Profile circumstances you will be able to exempt certain classes from voting.

Every X rounds, there will be an Election. This will shuffle the amount of power different Factions wield within your Political Body. Powerful Factions will be more likely to make Demands on you.

5.6.12.1. POLITICAL BODIES

You always have one of the following Political Bodies:

Parliament

A democratic assembly. However, you can change the voting rules to make it more or less democratic.

Senate

An elite assembly. Only your Leaders can vote to elect your senators.

Politburo

Although there is no assembly there is still a counter power you have to deal with. All the Leaders in your Cabinet have a vote to determine which trustees to send to your 'shadowy' Politburo.

5.6.12.2. ELECTIONS

Elections are straight forward affairs, but how do specific classes of voters vote?

Population of a Zone vote

Up to (50% * Happiness / 100 * Oratory Roll / 100) go to the Faction preferred by the Governor.

Remainder of the votes go to the agenda of the specific Populace. This agenda depends on the type of private Assets present in the Zone.

Workers of a Zone vote

Up to (100% * Happiness / 100 * Administration Roll / 100) go to the Faction preferred by the Governor.

Remainder of the votes go to the agenda of the specific Populace. This agenda depends on the type of public Assets present in the Zone.

Soldiers of a Unit vote

(50% * Morale) go to the Faction preferred by the first Commander in their chain of command. Remainder of the votes are determined by how the tide of battle feels to be going from the perspective of the Soldiers.

Depending on the following the Soldiers will prefer the following profiles

- Conquest rating low => Mind
- Conquest rating high=> Fist
- Casualty rating low => Fist
- Casualty rating high => Heart
- Word rating low => Democracy
- Word rating high => Autocracy

Leader's vote

A leader will always vote for his/her own Faction (or the best similarity score if not a Faction member).

Minority – Majority effects on vote

If the Regime's ratings on QOL, Size, casualties or Popularity improved during the last elections, the Majority Faction(s) get a bonus in the election. If the inverse is the case, the Minority Factions get a bonus in the elections.

Faction Support

Support denotes that the Faction is receiving political support as well as information and resources that will enable it to do its job more efficiently. It is possible to give your own Factions or Factions of other Regimes an amount of Support Points by using Stratagem to support them during the elections. A maximum 400 Support Points are taken into account, which translate into more or less doubling the Factions vote.

Politburo Seniority Effects

Note that if your Political Body is a Politburo, the voting is not fair. No surprise there... The influence (they don't actually technically vote by raising hands) exercised by each Cabinet member in sending of trustees to the Politburo is weighted for their Seniority level.

5.6.12.3. POLITICAL SYSTEM CHANGE

Your Regime Feat Parliament, Senate or Politburo can change based on who you are allowing to participate.

A Parliament changes to a Senate once neither your Population, Workers or Soldiers have the right to vote.

A Senate changes to a Politburo upon you have restricted the right to vote to your Cabinet.

A politburo changes to a Senate or Parliament once the vote has been extended outside of your Cabinet.

You can have a Class based or a Representational voting system. This is only of interest if you have a Parliament. In a representational system, it is one man one vote. In a class-based system, the Population's vote determines 25% of the seats, the Workers' vote determines 25% of the seats, the Soldiers' vote determines 25% of the seats and your Leader's vote determines 25% of the seats. It is possible to take away the voting rights of certain classes, which makes the class-based voting system an interesting choice for political engineering.

If you have certain Regime Profile values, certain Political System changes will eventually be proposed.

CHANGE PROPOSED	RELATED PROFILE
Take Pop vote away	demo<30, merito>=50 | auto >=50
Take Worker vote away	demo<30, merito>=50 | auto >=50
Take Soldiers vote away	demo<30, merito>=50 | auto >=50
Give Pop vote	demo>=50 , merito<30 & auto<30
Give Worker vote	demo>=50 , merito<30 & auto<30
Give Soldier vote	demo>=50 , merito<30 & auto<30
Take Leaders vote	merito<30, auto>=50
Give Leaders vote	merito>=50, auto<30
Introduce Class based voting	commerce>=50, government<30
Introduce Representational voting	commerce<30, government>=50

5.6.13. MINOR MECHANICS

Minors have a number of special mechanics active.

5.6.13.1. MINOR MILITIA GROWTH

This is normally based on their Cultures Militancy Score. However, some Cultures get "Militia" growth by killing/consuming or selling the habitants of the Zone. This last category includes Arachnids, Mutants and Slavers.

Furthermore, human Cultures can spend any Credits they might have to buy more Militia.

Higher game Difficulty levels will give Minors greater Militia Growth.

5.6.13.2. NO CULTURAL ADJUSTMENT

If the Minor Culture is non-human or inclined to kill or sell the population, the population will not adjust to their new masters.

5.6.13.3. DIPLOMATIC AVERSION

Some Minor Cultures will never participate in Diplomacy, either because they don't want to or because they cannot. Cultures who don't do diplomacy include AIs and Arachnids, but also Slavers and Nomads.

5.6.13.4. DEMANDS AND REQUESTS

Minors can approach you with demands and requests of a varying nature. It can be threats of war… blackmail… selling of slaves... etc...

5.6.14. REGIME RELATIONS

You have a Relation Score for each Regime you are aware of. You can influence this Relation by playing Stratagems and responding to diplomatic Decisions. And so can the AI.

5.6.14.1. MINOR REGIMES RELATIONS

A Minor Regime can have three possible core states. It is either Independent, Protected or a Client State.

Protected Status

A Minor Regime can only have one protector.

If you are the protector, the Minor Regime will no longer perform any negative acts towards you.

If a protected Minor is attacked by another Major Regime then it will join your Regime.

Client State

The Minor will no longer do any diplomacy at all and will send you some Credits every turn.

Joining You

Joining your Regime means the Minor Regime will completely disappear of its own accord. A join might be the effect of a Minor that is protected by you, or your client state, being attacked by another Major Regime.

Once a join goes into effect:

- All their Units will switch to friendly Militia Units
- Their Militancy level will be set at your Relation level
- The Leader of the old Minor will become the Zone Governor with loyalty equal to your Relation level

Declaring War on a Minor

First of all, this might lead you to declaring war on a Major as well if the Minor has a Protector or is a Client State of another Major.

Here follow the other repercussions of declaring war on a Minor:

RELATION WITH MINOR	HAP. REP.	LOYALTY REP.	POLITICAL REP.	FIST PROFILE
0-30	-	-	-	+3%
31-40	-	-	-	+6%
41-50	-	-	-	+9%
51-70	1d10	-	-	+12%
71-90	1d10	-	-	+15%
91-100	2d10	1d10	-	+18%
You are the Protector	4d10	2d10	2d10	+5%
Minor is your Client state	6d10	4d10	4d10	+10%

5.6.14.2. MAJOR REGIMES RELATIONS

What you need to keep an eye on concerning your Major Regime neighbours is your Relation level with them and the relation Status. Both give you a hint of how likely it is you'll find yourself at war with them.

To be reasonably sure war will not break out try to keep the Relation level at least above 30. Furthermore, try to avoid the relation Status turns to Hostile. A Hostile status is a very serious warning sign war might break out really soon.

AI internal politics

Each AI Major Regime Culture can have one of three Factions in power. Depending on which Faction rules their Regime they'll have different tendencies.

The relation Status

You might want your Relation level higher or lower, or you might want to sign agreements or pacts with a Major Regime, but the AI controlling a Major AI has its own attitude. This is shown through the relation Status. The following Status exist:

Allies

AI would like to be Allies. This means it is very willing to start signing pacts.

Friends

AI would like to be Friends and will probably be happy to sign a good number of agreements with you.

Cold

AI is not particularly interested in signing any agreements with you. And is not particularly fond of you either. However, it is not Hostile, so it will probably not go to war.

Blackmail

The AI sees you as a potential target of extortion. This is not good, but at least means it has no immediate plans to go to war with you. With the emphasis on "no immediate". Watch your back!

Hostile

The AI sees you as a Regime that it will find itself at war with. Rather sooner than later.

Deals and pacts

It is possible (by play of diplomatic Stratagems) to make deals and pacts with another Major Regime. These allows different Levels of communication, trade, scientific cooperation and military pacts:

Communication Level

Level 1 is Open Communication Lines. It allows you to actually propose all other deals and pacts.

Level 2 is having embassies in each other's Capitols. It increases your Recon on the other Regime.

Level 3 is establishing cultural exchanges. It further increases your Recon, but not much else. Highly symbolic.

Trade deal Level

Level 1 actually allows trade between your Regimes. If no Level 1 trade deal is struck, there will be some illegal trade, but it will be very limited.

Level 2 is Free trade and makes it impossible to impose Tariffs on cross-border trade for both sides.

Level 3 is Free movement and makes it much, much easier for Population to relocate from one Regime to another.

Scientific deal Level

Level 1 is Scientific cooperation which allows both sides to gain discoveries from the other side.

Level 2 is Scientific exchange which will allows actual research points to be given from one side to another but only if the Regime with the higher research is 50 points ahead in the field in question.

Level 3 is Scientific joint effort and will actually share all research progress.

Military pact Level

Level 1 is a Non-Aggression pact. In theory it disallows Declaring War on the other. But in reality this is still possible, but at a high cost for the one Declaring War.

Level 2 is a Friendship pact. Here you'll automatically become the enemy of their enemies and vice-versa.

Level 3 is very special. It is the Victory pact. With this Level active it is possible to attain a Joint Victory and win the game as Allies.

Declaring War

The maximum size of Troop types that can be moved through this Air Bridge is equal to the root of (the average cargo capacity in kg divided by 1000) and rounded up.

5.6.14.3. DECLARING WAR

You always have the option to invade another Regime. Even if you have a Non-Aggression pact in place. You can break your promises. However… invading a Regime with which you have a good Relation or a pact in place with will have severe repercussions.

Your Populace, Leaders and Troops are not robots and they will follow you to a lesser degree if they do not agree with your invasion.

In general, it is a good idea to first reduce the Relation with another Regime before declaring war on it.

Declaring War on a Major

This can have much more severe repercussions than invading a Minor:

RELATION WITH MAJOR	HAPPINESS REP.	LOYALTY REP.	POLITICAL REP.	FIST PROFILE
0-10	-	-	-	+3%
11-20	-	-	-	+6%
21-30	-	-	-	+9%
31-40	1d10	-	-	+12%
41-50	1d10	-	-	+15%
51-60	2d10	1d10	-	+18%
61-70	4d10	1d10	-	+21%
71-80	8d10	2d10	1d10	+24%
81-90	12d10	4d10	1d10	+27%
91-100	16d10	8d10	2d10	+30%
You have a non- aggression pact	8d10	6d10	6d10	+15%
You have a Friendship pact	10d10	8d10	9d10	+20%
You have a Victory pact	12d10	10d10	12d10	+25%

High Autocracy reduces repercussions

Because declaring war befits your ideology, your followers are not going to be surprised nor outraged at whimsical behavior. Even putting a knife in an ally's back will be considered (your) business as usual. An Autocracy Profile above 40 reduces the repercussions of declaring war. At Autocracy 60 the repercussions are halved and at Autocracy 80 or higher there are no repercussions at all.

Repercussions explained

The Fist Profile change is straightforward and increases your Aggression with a certain percentage.

The Happiness, Loyalty and Political Repercussions in the table above give the following effects:

Happiness Repercussion

The total value of your repercussion dice will translate in an equal percentage decrease of:

- Population Happiness
- Worker Happiness
- Leader Relation
- Soldier Morale

Loyalty Repercussion

The total value of your repercussion dice will translate in an equal percentage decrease of:

- Population loyalty
- Leader loyalty

Political Repercussion

The total value of these dice will translate in a percentage decrease of your:

- Word score

And an increase in absolute percentage points of your:

- Prestige Damage

5.7. STRATAGEMS

Stratagems are special ploys that you can play on your own Regime, a Zone, a HQ, a Leader or another Regime.

Stratagems can be produced by Organizations and will require some cost to be paid (in Credits, FP or PP) when executed.

A Stratagem will, in principle, be executed by the Leader in charge of the Organization that has produced the Stratagem. However, there are two exceptions. If a Stratagem has been produced by the Supreme Command Council but the dedicated council for the Stratagem is also present, the Director for the dedicated council will play the Stratagem. The other exception is with Stratagems that target friendly Zones, if this is the case the Governor of the Zone will play the Stratagem.

Stratagems can give you important advantages and subtle (or sometimes less subtle) ways to change your destiny.

5.7.1. SUPREME COMMAND COUNCIL STRATAGEMS

The Supreme Command Council is special as it is always present at start of game. It is capable of producing a limited subset of Stratagems from the other Councils.

It allows you to have some minimal Stratagem capability even if you are not creating any other Organizations.

Here follows a list of all Stratagems the Supreme Command Council can produce.

STRATAGEM	DEDICATED COUNCIL FOR THE STRATAGEM
Open Contact	Foreign Affairs Council
Expel Diplomats	Foreign Affairs Council
Trade	Foreign Affairs Council
Limit Trade	Foreign Affairs Council
Scientific Cooperation	Foreign Affairs Council
Limit Science Coop.	Foreign Affairs Council
Non-aggression pact	Foreign Affairs Council
Cancel pact Clause	Foreign Affairs Council
Gift 400 Credits	Foreign Affairs Council
Ask For Help	Foreign Affairs Council
Shadow Spy	Secret Service Council
Shadow Diplomat	Secret Service Council
Offer Protection *	Foreign Affairs Council
Propose Peace *	Foreign Affairs Council
Send Spy	Secret Service Council
Recruit Military	Interior Council
Recruit Junior	Interior Council
Recruit Mercenary	Interior Council
Medal of Merit	Interior Council
Bonus	Interior Council
Defence	Staff Council
Blitzkrieg	Staff Council
Field Training	Staff Council

* Only playable on Minors

Most of these will be executed by a different Director than that of the Supreme Command Council if the specific dedicated Council for the Stratagem is present. These dedicated Councils are noted in the column to the right.

5.7.2. SECRET SERVICE COUNCIL STRATAGEMS

Here follows a list of all Stratagems the Special Operations Organization can produce.

STRATAGEM	REGIME FEAT NEEDED
Shadow Spy*	
Send Spy*	
Assassinate Leader	Autocracy - Submission (50)
Threaten Leader	Enforcement - Efficiency Goals (50)
Gift to Faction	Commerce - Free Market (40)
Investigate Leader	
Support Faction	
Send Spy Team	
Send Spy Ring	
Call to Success I	Meritocracy - Administrative Competence (70)
Call to Success II	Meritocracy - Capable Small Business (80)
Call to Success III	Meritocracy - Competitive Culture (90)
Call to Rebellion I	Democracy - Due Procedure (70)
Call to Rebellion II	Democracy - Civil Society (80)
Call to Rebellion III	Democracy - Voters First (90)
Call to Power I	Autocracy - Strength of the Will (40)
Call to Power II	Autocracy - Martial Law (60)
Call to Power III	Autocracy - Reign of Fear (70)

* Can also be produced by the Supreme Command Council

5.7.3. FOREIGN AFFAIRS COUNCIL STRATAGEMS

Here follows a list of all Stratagems this Organization can produce.

STRATAGEM	REGIME FEAT NEEDED
Open Contact*	
Expel Diplomats*	
Trade*	
Limit Trade*	
Scientific Cooperation*	
Limit Science Coop*	
Non-aggression pact*	
Cancel pact Clause*	
Gift 400 Credits*	
Ask For Help	
Shadow Diplomat*	
Offer Protection */ **	
Propose Peace */ **	
Embassy	
Cultural Exchange	
Free Trade	
Free Movement	
Scientific Exchange	
Scientific Joint Effort	
Friendship pact	
Victory pact	
Provocation	
Propose Peace (with Major)	
Gift 1,000 Credits	
Gift 2,500 Credits	
Offer Client	
Unification	
Annexation	
Ouverture	
Xeno Diplomat	
Xeno Diplomat Team	

* Can also be produced by the Supreme Command Council
** Can only be played on a Minor Regime

5.7.4. INTERIOR COUNCIL STRATAGEMS

Here follows a list of all Stratagems this Organization can produce.

STRATAGEM	REGIME FEAT NEEDED
Recruit Civilian	Democracy - Engaged Politicians (40)
Give 500 to Populace	Commerce - Opportunism (50)
Give 2,000 to Populace	Commerce - Opportunism (50)
Volunteer Drive	
Militia Enthusiasm	Enforcement - Discipline (40)
Patriotic Collection	Meritocracy - Martial Tournaments (60)
Cabinet Retreat	Democracy - Conflict Resolution (50)
Governor Convention	Government - Bureaucracy (40)
Wargames	
Grand Convention	Meritocracy - Capable Supervisors (50)
Bureaucratic Push	Government - Bureaucracy (40)
Efficiency Drive	Enforcement - Efficiency Goals (50)
Mission Impossible	
Medal of Merit *	
Bonus *	
Official Gift	
Commercial Gift	Commerce - Wealthy Friends (60)
Estate Gift	Commerce - Wealthy Friends (60)
Zero Retirement	
Bronze Retirement	
Silver Retirement	
Golden Retirement	
Give 500 to Militia	
Emergency Tax	Enforcement - Discipline (40)
Draft Workers	Government - State Companies (50)
Draft Colonists	Government - Workers Rights (60)
Draft Recruits	Enforcement - Strongarm (60)
Increase Sales Tax	
Increase Income Tax	
Decrease Sales Tax	
Decrease Income Tax	
Import Tariff Increase	
Import Tariff Decrease	
Export Tariff Increase	
Export Tariff Decrease	
Recruit Military *	
Recruit Special Ops	Autocracy - Martial Law (60)
Recruit Talent	Meritocracy - Accomplished Diplomats (40)
Recruit Senior	
Recruit Junior *	
Recruit Mercenary *	

* Can also be produced by the Supreme Command Council

5.7.5. ECONOMIC COUNCIL STRATAGEMS

Here follows a list of all Stratagems this Organization can produce.

STRATAGEM	REGIME FEAT NEEDED
Prospecting Push I	
Prospecting Push II	Democracy - Open Politics (60)
Archaeology Effort	
Private Investment	Commerce - Free Market (40)
Attract Free Folk	Government - State Companies (50)

* Can also be produced by the Supreme Command Council

5.7.6. STAFF COUNCIL STRATAGEMS

Here follows a list of all Stratagems this Organization can produce.

STRATAGEM	REGIME FEAT NEEDED
Suppress Unrest	Autocracy - Suppression (50) Enforcement - Strongarm (60)
Razia	Autocracy - Total Power (90)
Forced Relocation	Autocracy - Strength of Will (40) Government - Workers Rights (60)
Pillage	Autocracy - Suppression (50)
Raze	Autocracy - Burned Earth (80)
Expel Population	
Defence*	
Retreat	Heart - Joint Struggle (60)
Forced March	Heart - Friendship (50)
Hold the Line	Heart -National Pride (40)
Recon in Force	
Infiltration	Mind - Tech Fascination (40)
Fluid Defence	Mind - Curiosity (50)
Small Pockets	Mind - Academic Mentality (90)
Field Training*	
Rush	Mind - Logical Thought (60)
Siege	Mind - Universal Truth (70)
Mobile Ops	Mind - Scientific Religion (80)
Entrench	
Economize	Heart - Band of Brothers (80)
Charge	Heart - Rallying Flag (70)
Fortress	Heart - Total Trust (90)
Blitzkrieg*	
Ambush	Fist - Warlust (50)

Defeat in Detail	Fist - Militarized Politics (70)
Shock and Awe	Fist - Total War Mentality (90)
All Out Attack	
No Retreat	Fist - No Retreat (40)
Suicidal Offensive	Fist - Fanaticism (80)
Glorious War	Fist -Esprite de Corps (60)

* Can also be produced by the Supreme Command Council

5.7.7. SCRAP STRATAGEMS

During a longer game you can end up with a huge pile of Stratagems. Some of them you'll never use and these can be scrapped. When you scrap Stratagems you'll gain Scrap Points which you can spend on crafting new Scrap Stratagems. These Stratagems are procedurally created and every time you generate one you might well see one you have never seen before. Note that every time you craft a Scrap Stratagem the price for the next one will go up.

Also be aware that the maximum Stratagems you can have in reserve is limited. Stratagems above the count of 300 will be scrapped without you being asked for your permission. (auto scrapping will favour Stratagems that have a high double count)

5.7.8. OTHER STRATAGEM SOURCES

You can thus produce Stratagems with Organizations. But there are other sources as well.

Faction Stratagems

If Factions are happy, they'll provide you with Faction Stratagems now and then. The Stratagems offered by your Factions correspond with the Regime Feats your Regime has. A happy Faction will give you Stratagems from Regime Feats that are in line with the Profile-likes of the Faction.

FACTION STRATAGEMS	REGIME FEAT NECESSARY	RELATED PROFILE & MINIMUM SCORE TO OBTAIN THAT REGIME FEAT
Double Shifts	State Companies	Gov-50
All for the Front	Efficiency Goals	Enf-50
Breakthrough Now!	Scientific Religion	Mind-80
Political Aid Truck	Engaged Politicians	Dem-40
Political Lieutenant	Militarized Politics	Fist-70
Militant Propagandist	National Pride	Heart-40
Crackdown on Unrest	Martial Law	Aut-60
Local Referendum	Open Politics	Dem-60
Worker Privileges	Capable Supervisors	Mer-50
Zoo Project	Curiosity	Mind-50
Commercial Project	Free Market	Com-40
Militia Project	Voluntarism	Fist-40
Insult	Esprit de Corps	Fist-60
Civil Delegation	Civil Society	Dem-80
Plea of Friendship	Accomplished Envoys	Mer-40
Investor Backing	Wealthy Friends	Com-60
Popular Rally	Joint Struggle	Heart-60
Co-optation	Private Careers	Com-80
Sacred Oath	Citizen Loyalty Oath	Enf-70
Hero of the Nation	Submission	Aut-50
Administrative Review	Central Computer	Gov-70

Artefact Stratagems

If you scavenge Hexes where you made Archaeological Finds, you can obtain Artefact Stratagems. These are almost always free to play and model the assignment of an Artefact found in an Archaeological dig to a Leader, Unit or Zone. Some of the Stratagems will be common others will be rare or even very rare. The rarity corresponds with the rarity of the Archaeological Find where they are dug up.

Fate Stratagems

You'll gain Fate Stratagems over time. Fate Stratagems are usually fairly strong and they cost Fate Points to play.

5.8. LEADERS AND FACTIONS

Leaders serve many purposes in your Regime. They lead your Armies, govern your Zones and direct your Organizations.

They can provide Skill bonuses and your relations with them influences how well they are doing what they are doing.

Keep in mind that it is always a good idea to have somebody in charge of Zones, Organizations and HQ Units. It is wiser to assign a lousy Leader, with low skills or low Relation then not assigning any Leader at all.

Leaders tend to group together in Factions to make their weight felt collectively. You can think of Factions as an analogue for Political Parties.

5.8.1. STATS

A Leader has core Stats that determine his personality and modifiers for Skill Rolls.



A Leader has many Stats and Skills

5.8.1.1. RELATION STAT

The most important of all Key Stats is the Relation Stat of your Leaders. Your Relation level with your Leader can vary between 0 and 100. Above 50 you'll receive bonuses on the work the Leader is doing. Below 50 you'll receive penalties. However, keep in mind that if no Leader is assigned the invisible replacement acts as a Relation 0 Leader. So it is almost always prudent to assign Leaders to vacant posts.

For Governors, the Relation Stat impacts Public Resource/Item production levels, (like Food, Energy, Metal, but not PP or BP).

For Commanders, the Relation Stat impacts the XP (training) and Morale recuperation speeds.

For Directors, the Relation Stat impacts the progress speed of their Tasks.

For all Leaders, the Relation Stat impacts the Skill Roll results somewhat.

5.8.1.2. OTHER KEY STATS

These are the most important Stats. Always keep an eye on these.

Loyalty

If Relation is higher than loyalty, then loyalty will usually slowly go up. And the reverse is also true: if Relation is lower than loyalty, then loyalty will usually slowly go down. Low Loyalty (<50) combined with low Relation has a big impact on the chance if any unsatisfied Leader events will occur.

War

Measure of ability to wage war and direct Troops in battle as well as military related fields. Used as positive modifier on certain Skill Rolls. War is a crucial Stat for your military Leaders.

Charisma

Measure of leadership, ability to command loyalty and ability to convince people. Used as positive modifier on certain Skill Rolls. Charisma is a crucial Stat for the Leader that handles your Diplomacy. It is also quite important to Zone Governors, especially when they are confronted with incidents.

Intelligence

Measure of ability to design, manage and solve puzzles. Used as positive modifier on certain Skill Rolls. Intelligence is a crucial Stat for everybody, but especially your Directors and Governors.

Technical Rating

Is the highest Skill Level in the Technical Skill Family increased with the Intelligence Stat. This increase is partial if highest Skill Level is below 20.

It gives you a quick idea of how well the Leader will function as a Governor or a Director.

Command Rating

Is the highest Skill Level in the Technical Skill Family increased with the War Stat. This increase is partial if highest Skill Level is below 20.

It gives you a quick idea of how well the Leader will function as a Commander or Secret Service or Staff Council Director.

Interpersonal Rating

Is the highest Skill Level in the Technical Skill Family increased with the Charisma Stat. This increase is partial if highest Skill Level is below 20.

It gives you a quick idea how the Leader will function as Foreign Affairs Council Director.

But it is also an important indicator how well a Governor could handle emergencies and events that require his/her intervention.

Seniority Rank

This is a relative measure. The rank can be between 0 and 100. If at 100, it means this Leader is the most senior Leader in your service. Relieving Leaders of their functions impacts the Relation of all your Leaders. A Leader with high Seniority has much more impact on the others than one with low Seniority. Seniority is slowly build up depending on the Job Prestige of the Job you assigned them to.

Corruption Level

Ideally this should be at 0. However, it can rise if Relation is not optimal (chance starts to be significant below 70) and their Egoism Personality level is high. It denotes a certain level of openness to pursue personal goals at the expense of the Regime's goals. The Corruption Level signifies the percentage chance of this happening in a specific turn. Keep in mind, it is normal for almost all Leaders to sometimes be tempted to work for some personal gain. Corruption Level can go down again as well. A positive Corruption Level does not mean the Leader is actually engaged in Corruption. If they did any such activity it will be shown as "known theft".

Faction Membership

A Leader can be a member of even the person in charge of a Faction. See Faction paragraph for more information.

Natural Relation Point

A complicated calculation that takes into account many factors. The Relation you have with a Leader always tend to fall or rise towards the National Relation Point. However, it will fall quicker than it will rise and ambitious Leaders might not see any rise at all.

Elements used in calculation are:

- Loyalty
- Ambition versus Prestige of Job
- Average Unit Morale (if Commander)
- Zone Happiness (if Governor)
- Likes and Dislikes, low egoism helps diminish the effects of Profile conflicts
- Advisor Friction
- Salary Effects, low egoism helps the impact of the Credits
- Faction Happiness, higher Faction Happiness increases the Natural Relation Point
- Your own Word Score modifies the result, but more so for high heroism and low ambition Leaders

Experience Points (XP)

When you first meet a Leader, he or she will already have some Experience Points. These are the points that have been spent on his or her Skills.

As your Leaders are involved in decisions, combat or just doing their regular work their XP will go up.

New XP will be spent on improving Skill Levels. The Skills the Leader will improve with these points will usually be the ones he has been using.

Advisors continue earning XP, but normally less than the Leader they are embedded with.

In Combat, successful attacks or successfully holding a Hex will give more XP than failed offensives and losing Hexes to enemy attack.

SHQ Commanders will benefit less than OHQ from XP gain through Combat on a Combat-per-Combat basis, but once you'll have a big army with lots of OHQs the SHQ Commander will be involved in many more battles than each of the OHQ Commanders and it is highly probable your SHQ Commander will quickly become very experienced.

Other XP sources include Skill Rolls.

5.8.1.3. MINOR STATS

These have function as well, but they'll be very specific or less often used during game.

Strength

Measure of physical and mental force as well as constitution and stamina. Used as positive modifier on certain Skill Rolls.

Willpower

Measure of ability to not be manipulated or blackmailed by others. It also denotes strong defence against fear and social pressure. Used as positive modifier on certain Skill Rolls.

Personality: Emotional

Value from 0 to 100. The higher this value the more emotional the Leader is. The lower the more logical the Leader is. At the moment this is mostly an aesthetic Stat, but it does impact potential friction with an Advisor. Furthermore, when they feel some of the Regime Profiles are moving in the wrong direction, it might increase the chance of this Leader taking the law into his/her own hand.

Personality: Heroic

Value from 0 to 100. The higher this value, the more heroic and principled the Leader is. A Heroic Leader sees him or herself as somebody who sets the example and is irreproachable. The lower the Heroic score the more unprincipled the Leader is. High Heroic Leaders will be less likely to turn corrupt or to rebel against you. If they are unsatisfied, they'll probably just say goodbye and leave in an honourable fashion. High Heroic Leaders are relatively rare.

Personality: Ambition

Value from 0 to 100. The higher this value, the more ambitious the Leader is. The lower, the more of a henchman attitude he has. High ambition can cause

a more rapid decline in Relation after some temporary high. Low Ambition can cause more rapid increase of Relation after temporary disappointments. Furthermore, ambitious Leaders desire jobs with high Job Prestige and they take demotions very badly. Last but not least: ambitious Leaders have more chance of rebelling against you when they are dissatisfied. High Ambition Leaders are relatively common and there is a small positive correlation with the Capability Class.

Personality: Authority

Value from 0 to 100. The higher this value, the more natural authority the Leader has and the less submissive he/she is. The higher the authority, the more chance a Leader will follow his own Profile instead of the Regime Profile when making a Decision you delegated. It also impacts potential friction with an Advisor. Furthermore, when they feel some of the Regime Profiles are moving in the wrong direction, it might increase the chance of this Leader taking the law into his/her own hand.

Personality: Egoism

Value from 0 to 100. The higher this value, the more egoistic the Leader is. The lower, the more altruistic the Leader is. It impacts the effect of salary on their Relation level. Egoist Leaders are hard to satisfy, and their loyalty will increase slower than that of more altruistic Leaders. Furthermore, a high Egoism level will increase the chance for them growing Corrupt at some point.

Personality: Witty

Value from 0 to 100. The higher this value, the wittier the Leader is. The lower, the duller the Leader is. At the moment this is mostly an aesthetic Stat, with no real game impact (except for Advisor friction).

Capability Class

Classes vary from Level I to Level V. The higher the better. Level II and III are usually most common. Level IV should be rare, and it is not certain that you'll ever see a Level V in your ranks.

The Capability Class provides you at a glance with a measure of how useful this Leader will be. And most importantly its Class is also a modifier for XP Points gained through Skill Rolls. Level I gets no bonus on XP growth, but Level II gets +30%, Level III +70%, Level IV +120% and Level V +180%.

5.8.2. JOBS

Keep in mind that different kinds of Jobs are considered more or less prestigious by your Leaders. Promoting a Leader to a more prestigious Job will improve your Relation with the Leader, while demoting a Leader will decrease your Relation.



A Governor needs to be placed in every Zone



Each of your Operational HQs (OHQs) should have a Commander

5.8.2.1. JOB PRESTIGE

JOB	PRESTIGE
Reserve Pool	0
Governor	40
OHQ Commander	40
Advisor	70
Secretary	70
SHQ Commander	100
Director	100

5.8.3. SKILLS

Leaders can have a small or large selection of Skills they have mastered. There are over 40 different Skills a Leader can have.

5.8.3.1. SKILL ROLLS

Skills are used for Skill Rolls. These are made during several mundane regular tasks, during combat, often when playing Stratagems and sometimes during decisions.

The Stat modifier (Cha,Int,Wis,War,Wil) on your Skill Roll depends on the Skill Level:

- The Skill Level of a Leader is 20 or more:

  Stat Points + Skill Level + 1d100
- The Skill Level of a Leader is below 20:

  (Stat Points * Skill Level / 20) + Skill Level + 1d100

The Leader thus needs to know the Skill at least a little bit in order for his/her Stat to function as a positive modifier.

If the Skill is part of a Skill Family, then the following bonus is added:

+ ((Highest Skill Level in Skill Family – Skill Level)/2)

Furthermore, the result of ANY Skill Roll will be modified by: **-20/+20 depending on your Relation with the Leader.**

A penalty of -25 is applied if your Secretary is making the roll."

As well as any possible Leader Feats. These Leader Feats applied on Stats are also modified downwards if the Skill Level < 20. If the Leader Feats modify the Skill directly the effect is always fully applied.

Last but not least, there are also some Skills that can increase the roll of other Skills. Like for example 6th Sense.

5.8.3.2. SKILL FAMILIES

There are three Skill Families. The Interpersonal Family, Technical Family and Command Family. These group similar Skills and provide a Leader with one good Skill in the family with good Skill Rolls on all Skills in the Skill Family

5.8.3.3. SPECIAL SKILL ROLL RULES

If you have an Advisor attached to a Leader, that Advisor will make the same Skill Roll and if it's higher, the Advisor's Skill Roll will replace the roll.

If you have a Leader functioning as a Secretary making a Skill Roll, a penalty of -25 will always be applied. This due to the inherent difficulty for the Secretary of performing non-secretarial tasks while being buried in paperwork and well… being the Secretary is not the same as being the Governor or Commander.

5.8.4. SKILL LIST

The Skills are grouped in three families and there remains a group of Skills that are without a family. Notably a lot of Skills useful in specific combat circumstances.

5.8.4.1. TECHNICAL SKILL FAMILY

SKILL	RELEVANT STATS	USED BY DIRECTORS WITH TASKS
Administration	Intelligence	All Interior Council Tasks.
Investigation	Intelligence	
Trade	Intelligence	
Technician	Intelligence	All Applied Sciences Tasks.
Medical	Intelligence	
Science	Intelligence	Research Tasks of Military and Economic Councils.
Prospecting	Intelligence	Prospecting Task.
Scavenging	Intelligence	
Interrogation	Intelligence	
Agriculture	Intelligence	
Inventor	Intelligence	Discovery Tasks of Military and Economic Councils.
Ecology	Intelligence	

5.8.4.2. COMMAND SKILL FAMILY

SKILL	RELEVANT STATS	USED BY DIRECTORS WITH TASKS
High Command	War	All Tasks of the Staff Council.
Operational Command	War	
Covert Ops	War	All Tasks of the Secret Service Council.

5.8.4.3. INTERPERSONAL SKILL FAMILY

SKILL	RELEVANT STATS	USED BY DIRECTORS WITH TASKS
Bribery	Charisma	
Diplomacy	Charisma	All Tasks of the Foreign Affairs Council.
Leadership	Charisma	
Deception	Charisma	
Streetwise	Charisma	
Oratory	Charisma	
Intimidate	Charisma	
Interrogation	Charisma	

5.8.4.4. SKILLS WITHOUT SKILL FAMILY

SKILL	RELEVANT STATS
Survival	Strength
6th Sense	Willpower
Personal Combat	Strength
Lead from Front *	Strength
Endurance	Strength
Escape Artist	War
Improvisation	Willpower
Against the Odds	War
Resist Influence	Willpower
Demolitions	War
Tank Tactics	War
Gun Tactics	War
Infantry Tactics	War
Offensive Tactics	War
Defensive Tactics	War
Mobile Tactics	War
Defensive Works	War

5.8.4.5. BRIBERY

The noble art of making sure things keep running smoothly. Useful to maximize effect when forced to pay bribes or when you choose to make a donation to a specific group.

Used in: Major Regime Stories + Stratagems

5.8.4.6. DIPLOMACY

Diplomacy is all about balancing one's own desires with having some empathy for the foreign culture you're involved with. Improves your chances on numerous Diplomatic overtures.

Used in: Major Regime Stories + Diplomacy Stratagems

5.8.4.7. LEADERSHIP

This skill is sort of close to Administration. But where Administration is about the dull and daily work, Leadership denotes how well the Leader can cope in an emergency situation. It also denotes the impact the Leader can make on others, for example by pinning a medal on somebody's chest. If done by somebody with low Leadership, it makes less of an impression.

Used in: Danger Stories + Stratagems + Political Power Task + Morale of Units under Operational HQ Commander.

5.8.4.8. DECEPTION

This skill is very tactical by nature and often found with individuals who extensively travelled through hostile lands. Helps in defensive combat in Hexes that provide Entrenchment.

Used in: Defence bonus for Units under Operational HQ Commander

5.8.4.9. STREETWISE

The art of distinguishing between a regular citizen and a criminal. Leaders with this skill are also well versed in finding, understanding and talking to rogues and assorted shady characters.

Used in: Crime Syndicate Stratagems

5.8.4.10. ORATORY

Being a master in Oratory means being able to dazzle an audience with words. To talk straight what is crooked.

Used in: Proposing Peace, Giving Gifts to other Regimes, Quelling Unrest, Convincing third parties and giving a good speech of course.

5.8.4.11. SURVIVAL

If the Planet has edible wildlife then this Skill allows a Governor to reduce Hunger for up to 10K Populace and allows an Operational Commander to reduce Hunger for up to 1K Troops.

Used in: Hunger reduction

5.8.4.12. 6TH SENSE

Hard to define, but a very valuable Skill. It gives the Leader a sense of what is the right course of action in almost any situation. It adds a random bonus of 1 up to half its value to any Skill Roll.

Used in: Skill Rolls

5.8.4.13. INTIMIDATE

Useful to instil obedience and fear in Leaders or Populace.

Used in: Stratagems

5.8.4.14. PERSONAL COMBAT

Leaders don't often have to engage in physical or close combat themselves, but when they do, this Skill is crucial.

Used in: Avoid Assassination Stratagem, Avoiding death for Leaders who find themselves in Frontline

5.8.4.15. LEAD FROM FRONT

The Operational Commander with this Skill tends to find himself in a frontline trench or with the most forward panzer. It can give a Morale boost every combat round.

Used in: Combat Morale Recovery

5.8.4.16. ENDURANCE

Some Leaders just refuse to grow old and senile. Leaders with high values on this Skill are tough and strong and will stay with you for a long time.

Used in: Old Age Effects

5.8.4.17. ESCAPE ARTIST

Operational Commanders with this Skill have the uncanny ability to make their Troops disappear from the battlefield when things turn sour.

5.8.4.18. ADMINISTRATION

Most people look down on paper pushers, but in fact it something hard to do right. Leaders involved in day-to-day management and administrative tasks receive up to thousand times more data than they can ever consume and to properly respond the Administration Skill helps.

Used in: many Stratagems, boost to Private Credits, many Organization Tasks

5.8.4.19. IMPROVISATION

This helps the Leader in question to make a Skill Roll on a Skill he doesn't master very well. If any Skill Roll is made on a Skill with a value of 15 or lower, the Improvisation Skill adds a small bonus.

Used in: Skill Rolls

5.8.4.20. AGAINST THE ODDS

Used by the Operational Commander the moment one of his/her Units is about to panic. Having this skill will help in avoiding that and keep the Troops standing their ground.

Used in: Panic checks during Combat

5.8.4.21. RESIST INFLUENCE

Any Leader with this Skill has more chance to resist a Faction, changing your Relation with the Leader.

Used in: Leader Relation calculations

5.8.4.22. HIGH COMMAND

A very important Skill for SHQ Commanders as well as Staff Council Directors. It denotes all kinds of abilities needed to do strategic and high-level military thinking and decision making.

Used in: Combat, Readiness Recovery and Formation Discovery and Operationalization

5.8.4.23. INVESTIGATION

The ability to lead an investigation and to find out who the ringleaders of troublesome groups are. Also helps to give guidance to local security forces.

Used in: Unrest events, Zone Security Level calculations

5.8.4.24. TRADE

Helps Governors to stimulate Trade in their Zones. It is also a big boon when negotiating with Traders (SHQ_Commander) and can give a good rebate on a Buy or a good bonus on a Sell.

Used in: Trading

5.8.4.25. TECHNICIAN

Leaders with this Skill have a good understanding of all kinds of mechanical devices and machinery.

Used in: Model Discovery and Design, Danger Events

5.8.4.26. MEDICAL

Medical Skill denotes a level of competence in Medicine. The Leader with this Skill will be better able to manage health related issues and recognize and guide treatment of diseases.

Used in: Zone Health Level calculations, Danger events

5.8.4.27. DEMOLITIONS

A crucial Skill for an Operational Commander leading Troops against an entrenched enemy. By making proper use of explosive charges, this Commander can aid his/her Troops to reduce enemy Entrenchment.

Used in: Combat

5.8.4.28. OPERATIONAL COMMAND

The most important Skill for the Operational Commander. It denotes his overall grasp of operational command.

Not only used in regular combat, but also during some security operations that involve Troops.

Used in: Combat, Stratagems, Readiness recovery calculations

5.8.4.29. SCIENCE

Probably the best place for a Leader with a high Science Skill is to be placed at a Research Council.

However, Science Skill might also come in handy for Governors when they are involved with educational policies.

Used in: Research Tasks, Zone Education Level calculation

5.8.4.30. PROSPECTING

Seemingly a hard science, but in reality it is all about intuition and experience. Leaders with this Skill are able to locate hidden resources as well as give instructions how to best exploit existing mines.

Used in: Production, Prospecting Task, Independent Zone Prospecting Discoveries

5.8.4.31. SCAVENGING

To find a 100 square kilometre sized field of rubble is one thing, but to find those few spots where there are useful resources left is another. This Skill helps maximize scavenge returns.

Used in: Production

5.8.4.32. INTERROGATION

Especially useful for a Governor dealing with Unrest. By effective interrogation, it can be possible to find culprits and ringleaders and quell any rioting or strikes.

Used in: Unrest events

5.8.4.33. AGRICULTURE

Leaders with a farming background can be useful as Governors of agricultural Zones when they have this skill. They know how to manage agricultural installations and/or fields.

Used in: Production

5.8.4.34. INVENTOR

One can be a good scientist, but never have an original idea. The Inventor Skill is all about looking at science from a creative angle. This Skill will aid with making Tech Discoveries.

Used in: Tech Discoveries

5.8.4.35. TANK, GUN AND INFANTRY TACTICS

After Operational Command, these 3 are among the most important Skills for an Operational Commander.

The use of the Skill improves the combat performance of this specific type of Troops.

Used in: Combat

5.8.4.36. OFFENSIVE TACTICS

This Skill is used by an Operational Commander for commanding the offensive operations of their Units.

5.8.4.37. DEFENSIVE TACTICS

This Skill is used by an Operational Commander for commanding the defence mounted by their Units.

Used in: Combat

5.8.4.38. MOBILE TACTICS

An Operational Commander with this Skill has a really good grasp of maneuvering and getting the most out of motorized forces. Units under a good Mobile Tactician can get extra Action Points (AP) points at start of turn.

Used in: AP calculations

5.8.4.39. DEFENSIVE WORKS

This Skill will aid an Operational Commander in entrenching his/her Troops. It denotes knowledge how to plan defensive lines, build pillboxes, dig trenches and plan fields of fire.

Used in: Entrenchment calculations

5.8.4.40. COVERT OPS

This Skill denotes the specialized field of covert operations. This is the must-have skill for the Director of your Secret Service.

Used in: Stratagems, Secret Service Stratagem generation.

5.8.4.41. ECOLOGY

This Skill denotes knowledge of the local Flora and Fauna and can help Governors with guiding local hunting efforts.

Used in: Production

5.8.5. EXPERIENCE POINTS

Leaders can gain XP the following ways:

- 5 XP per round, due to regular work, reflection and study
- 5 XP per story / Stratagem skill check used
- 1 to 4 XP per combat round fought (longer fights thus gain more XP)
- 10 XP for victorious combat or holding a Hex against enemy attack

5.8.5.1. SKILL LEARNING

Once a Leader is amassing XP, he will spend his/her XP on buying new Skill Points. This is completely automated and the Leader will be most likely to choose a skill he or she had to use a lot.

A leader will pick one Skill every start of turn he'll try to spent his new XP on.

There is a random aspect in spending XP on a Skill and the chance of actually gaining a Level.

The average cost with a Stat of 25 of obtaining 1 new Skill Level is 5 XP for Level 1-9, 10 XP for Level 11-19, 15 XP For Level 20-29, etc.

This cost can be reduced or increased by the Relevant Stat. Below a Stat of 25 there is a negative modifier, above there is a positive modifier to the chance to gain a Skill Level.

A Skill cannot grow to more than 2 times the value of its relevant Stat(s). Skills will decrease if they are to high relative to their Stats.

5.8.6. LOSING LEADERS

They can grow old or die in combat, or just decide to leave you.

5.8.6.1. KILLED IN ACTION

Commanders do not always stay in their HQs and tend to visit their Units in the field. During combat this can result in losing a Leader.

A Commander, if having a very high Heroic personality, can be considered to always be present with one of all his/her Troops. If minimal, the Commander will always hug his/her desk in the HQ.

SHQ Commanders have half less chance to be present with their Troops due to the nature of their jobs.

If the HQ is directly involved in combat, the Commander will always be present in the frontline, even if the Leader is a coward.

If the HQ is lost, the Commander has to make a Personal Combat roll to see if he/she can avoid being killed in action.

Governors can be killed in action if their Zone City is lost during combat.

Directors and Advisors can be killed in action if the Capital City is lost during combat.

Advisors are always killed as well if the Leader they are embedded with is killed (they are presumed to have failed the skill roll together).

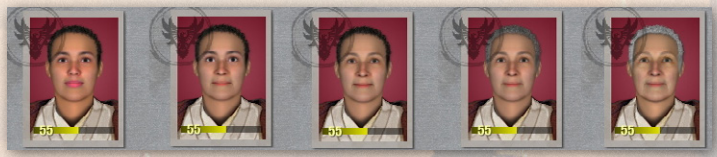
Losing your Capital is something you really want to avoid.

Your Secretary always survives. So do the Leaders in the Replacement Pool.

It is also possible your Leader will be killed during some story event, a Decision or due to a Stratagem.

5.8.6.2. OLD AGE

Though it is a dangerous world, some of your Leaders will grow to an old age. At some point the effects of Old Age will start setting in. The eventual effect of Old Age is always a loss of Stat points and an eventual retirement or natural death.



The grayer the Leader, the older he/she is

Old Age rules kick in at 50 + (Unmodified Strength / 2) years of age.

Once this age is reached the first 10 years the Leader has a 30% chance every birthday to lose 1 war and 1 strength stat point.

The second 10 years after the effects have kicked in every birthday the Leader has a 30% chance to lose 1 charisma point and a 60% chance to lose 1 war and 1 strength point.

If more than 20 years above the kick-in point the Leader has every birthday a 30% chance to lose 1 willpower point, 60% chance to lose a charisma point and a 100% chance to lose 1 war and 1 strength point.

5.8.6.3. RETIREMENT

Above 65 years of age the Leader will have (100-Ambition)/5 % chance to retire every birthday if his/her strength is below 20. And this increases to (100-Ambition)/2% chance if strength < 10. If strength reaches 0 the Leader always retires.

5.8.7. PROFILES AND LEADERS

There are a number of choices you can make that will influence your Relation with your Leaders.

Every Leader can have its own political, ideological, societal preferences. These likes are expressed with the + symbol. A single + denotes a like, while a triple +++ denotes a very strong like. Likewise a - denotes a dislike, but a triple --- denotes a very strong dislike.

These likes and dislikes impact your Relation with the Leader. If the Leader has a like, but your Regime Profile is below 50 for that like, it will impact the Relation negatively. The reverse is also true and if the Profile would be above 50 it would impact the Relation with this Leader positively.

If the Leader has a dislike and your Regime Profile is above 50 for that dislike, it will impact the Relation negatively. And positively if the Profile would have been below 50.

The Likes and Dislikes also play a strong role in the Leader choosing a Faction to join.

Furthermore, a difference between your Regime Profile and the Leaders likes and dislikes combined with a suboptimal Relation can result in the Leader causing an incident.

5.8.8. LEADER FEATS

A Leader can acquire special attributes, assistants or riches during the game.

These Feats can provide the Leader with a Stat or a Skill Roll bonus or even a Personality modifier.

5.8.9. INTERACTIONS

There are a number of choices you can make that will influence your Relation with your Leaders.

5.8.9.1. RELIEVING

They'll never be happy when relieved from their post. However, you can significantly reduce the damage done to your Relation with the Leader if you promise a different or better Job.

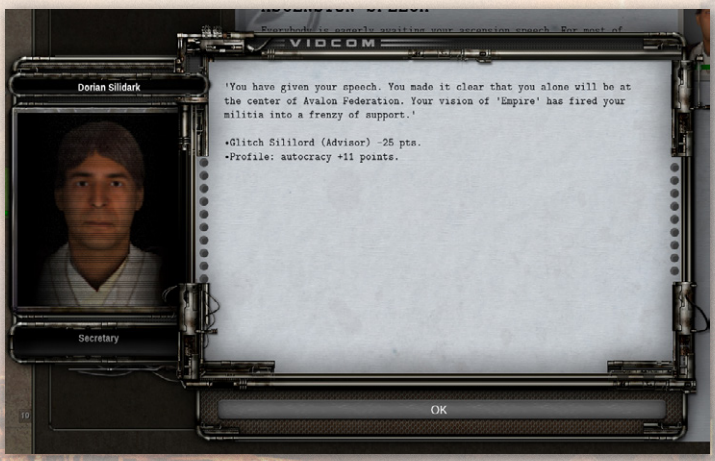
If you are firing a high Seniority Leader, the other Leaders will take a Relation hit as well. This effect is quite heavy for Leaders of the same Faction and quite light (only 1/3 of the previous effect) for others. Keep in mind your Relation with Leaders will go up again once you give the high Seniority Leader a new job.

Your Secretary is special and is more expensive to relieve and is also immediately replaced by a Leader chosen by your bureaucracy.

When you lose a Zone and the Governor did not end up KIA in the process he'll be classified as former-governor, meaning you still have fire him/her.

5.8.9.2. DECISIONS

A Decision can influence your Relation with a Leader.



This Decision for example made our Advisor unhappy

Any Decisions you did not make when you end your turn will be made by one of your Cabinet members or your Secretary. Keep in mind that, in theory, these Leaders should make the most "neutral" decision, but the lower their Relation Score, the more chance they might just make a choice that promotes their own personal agenda.

Keep in mind that actively Declaring War and reshuffling the National Budget can also affect Relations with your Leaders.

5.8.9.3. STRATAGEMS TO REMOVE A LEADER FROM RESERVE POOL

Sometimes you will want to get rid of a Leader.

You could wait till the Leader leaves out of his/her own volition. But that might be a violent affair in some cases. You can also retire the Leader by playing a Retirement Stratagem. The higher the Seniority Rank the Leader still possesses the harder it will be to do this.

To Retire a Leader, you must first get the Leader in the Reserve Pool. The following Retirement Stratagems can be produced by your Interior Council.

STRATAGEM	SOURCE	EFFECT	COST
Zero Retirement	Interior	If 1d20 > Seniority Rank, it succeeds	10
Bronze Retirement	Interior	If 3d20 > Seniority Rank, it succeeds	5 PP 250 Cr
Silver Retirement	Interior	If 5d20 > Seniority Rank, it succeeds	10 PP 500 Cr
Golden Retirement	Interior	If 7d20 > Seniority Rank, it succeeds	20 PP 1,000 Cr

Keep in mind that, if you don't make the roll on a Retirement Stratagem, the Leader might not be retired, but his/her Seniority will be reduced. A successful play of the Investigate Stratagem also reduces Seniority.

5.8.9.4. STRATAGEMS TO IMPROVE RELATIONS

There are many Stratagems that can be played on a Leader, but let's discuss an important category here. Those that improve your Relation with the Leader. Something that can be vital in some circumstances.

STRATAGEM	SOURCE	EFFECT	COST
Hero of the Nation	Faction with Autocracy Profile	Permanently increases Cha + 10 Immediate Relation +15%.	5 PP
Medal of Merit	Interior *	A personal visit and thus works even with altruistic Leaders. Permanently increases Cha + 10 Immediate Relation +25% Permanent Relation +1 Permanent Seniority +1	15 PP
Bonus	Interior *	Immediate Relation +10%	3 PP 100 Cr
Official Gift	Interior	Immediate Relation +30%	4 PP 200 Cr
Estate Gift	Interior	Immediate Relation +50% Permanent Relation +1	15 PP
Commercial Gift	Interior	Immediate Relation +50% Permanent Relation +1	5 PP 300 Cr

* Can also be generated by the Supreme Command Council.

5.8.9.5. SALARIES

Call your Secretary to discuss changing Salaries. Setting Salaries higher or lower for your Leaders will impact your Relation quite a lot.

Keep in mind that Salary settings have less impact on highly Egoistic Leaders who will be hard to satisfy.

If you are wondering why the Salaries for Leaders are so much higher than for Workers… this has to do with the nature of the society. A Leader has expenses way beyond those of the common people. A Leader usually has its own entourage, a compound, a large extended family and plenty of other costs that come with his/her position. Or in other words: there is a lot of inequality between the high and mighty and the lower classes.

5.8.9.6. NOMINATIONS

Once a position for Advisor, Governor, Commander or Director has become vacant you'll be presented with a list of nominations (drawn up by your Political Body) to choose from.

This list is weighted. And you might not always find your favourite candidate on it. In this case, refusing all nominees might result in others next turn. It is also possible to Dismiss a candidate.

The selection of the candidates depends a lot on your Political System. Below are the weighting calculations for selecting nominees used by your Political Body.

CANDIDATE'S TRAITS	PARLIAMENT WEIGHTS	SENATE WEIGHTS	POLITBURO WEIGHTS
Relevant Skills & Stats	15	25	20
Ambition	2	4	6
Extrovert	6	4	2
Faction Adherence	25 * vote% of Faction	10 * vote% of Faction	17 * vote% of Faction
Capability Level	2	6	4
Seniority Level	10		
Has job promised	10		

Keep in mind, randomization also plays a big role in the selection. Every committee discussion has its own dynamic.

You'll get more nominations if you have more Leaders in the Reserve Pool. Roughly a squared function.

5.8.10. FACTIONS

Factions are groupings of Leaders. Usually, they'll group around some shared agenda. You can think of Factions as political parties. Though obviously a Faction in a Parliament is more like a Political Party than a Faction in a politburo.

5.8.10.1. FACTION LEADER

Factions normally have a Faction Leader. This is the Leader that will address you to speak for the Faction.

Your personal Relation with a Leader that is also a Faction Leader will be impacted more by Faction Happiness than that of normal Leaders.

Faction Leaders can change and Leaders with higher Seniority Levels have more chance to become Faction Leaders.

5.8.10.2. FACTION LIKES

The same as for the Leaders. + Symbols note the strength of the like of a Faction. One + is just a simple like. Where triple +++ is a very strong like.

Usually the name of the Faction gives a strong clue to their major likes.

5.8.10.3. FACTION HAPPINESS

Factions also have a Happiness Level. This level is important and if high will provide you with benefits, while if low it will burden you with problems.

Faction Happiness changes when you make Decisions that concern Profiles that are in the Faction Likes and Dislikes.

Power Bases

There are the following Power Bases, which your Factions can acquire:

POWER BASE	LEADERS CONCERNED	PROFILES CONCERNED
Zones' administration	Governors	Heart and Commerce
National governmental	Advisors and Directors	Mind and Government
Military hierarchy	SHQ and OHQ Commanders	Fist and Enforcement

A strong Power Base can help increase the Ideal Happiness of a Faction quite a lot (or decrease it as well). The amount of this effect depends on the Profile affinity of the Faction with the specific Power Base. As shown in the table here:

POWER BASE STRENGTH	PROFILE <0	PROFILE 0	PROFILE +1	PROFILE +2	PROFILE +3	PROFILE +4	PROFILE +5	PROFILE +6
None	0	-2	-4	-6	-8	-10	-12	-14
Very Weak	0	-1	-2	-3	-4	-5	-6	-7
Weak	0	0	0	0	0	0	0	0
Average	0	+2	+4	+6	+8	+10	+12	+14
Strong	0	+4	+8	+12	+16	+20	+24	+28
Very Strong	0	+6	+12	+18	+24	+30	+32	+42

The level of the Power Base is calculated by comparing the actual number of Leaders in key positions for a specific Power Base with the amount it should have if it had an average share. In these calculations the importance of the Jobs (small Zone versus big Zone for example) is taken into account. For National Government Power Base calculations, a small or a large budget does not matter, it is the prestige of running a Council that counts.

Ideal Happiness

If current Happiness is higher than Ideal Happiness, it moves up to 10% towards its ideal Happiness. In the reverse case (decline), it goes much, much slower.

This Ideal Happiness is an average between:

- Your Regime Profile's similarity with the Likes of the Faction
- The average Faction-member Leader Relation
- The relative prestige of the Jobs held by the members of the Faction. Especially their Faction Leader.
- Power Base Modifiers
- Word score can modify it with up to -25 to +25. Which is a big range. And makes Word an important statistic for the Happiness of your Factions.



The most prestigious Jobs are inside your Cabinet

Impact on Leader Relations

The Leader's Profile similarity points are calculated with his/her Faction Profile. Then the Relation difference between Faction Happiness and this Leader's Relation is the % chance that the Leader's Relation will be adjusted towards the Faction Happiness. Either positively or negatively. The adjustment is more pronounced if Faction has lower Happiness than

higher Happiness and ambitious Leaders are less sensitive to Relation improvements.

The chance for this is double to happen for the Leader of the Faction.

The amount of adjustment depends on the Likes and Dislikes similarity of the Leader.

5.8.10.4. NEW FACTIONS AND LOSS OF FACTIONS

Based on the number of Leaders in your Regime, there will be a chance a new Faction will be formed. The more Leaders, the more Factions.

NUMBER OF LEADERS	NUMBER OF IDEAL FACTIONS
1-9	2
10-19	3
20-29	4
30-49	5
50+	6

The chance to get a new faction is 10% per round if you have more Ideal Factions than currently existing Factions.

The chance to lose a Faction is the same but for "calculations sake" the number of Leaders is fictively increased with 5. Meaning for example you'll only have a chance to lose one of your 3 factions once your number of Leaders drops below 5.

5.8.10.5. LEADERS JOINING FACTIONS

Leaders without Faction membership can be recruited by a Faction.

This can only happen if the Faction has similarity in Likes and Dislikes with a Leader.

The chance a Leader can be recruited in a specific round by a Faction is also dependent on this similarity level.

Ambitious Leaders are also quite swayed by Factions that are successful in elections or that have the members with the most prestigious Jobs.

Leaders adapting to their Faction

If one of the Leader's profile has negative influence on a Faction Profile or vice versa, it has chance to be diminished.

There is also a chance to increase the Leader's Profile that their Faction likes.

These chances are modified for Ambition and Heroic personality, the more ambitious and cowardly (less Heroic) the more likely the Faction is to change the likes and dislikes of a Leader.

5.8.10.6. FACTION DEMANDS

Factions are groupings of Leaders that try to promote a specific agenda.

If Faction Happiness is lower than 90, there is a chance that they make a Demand. The lower the Happiness, the higher the chance.

The Demands are always linked to one of your Regime Feats. A Regime Feat linked to a low value Regime Profile that is. A Regime Feat liked by the Faction is more likely to get involved in a Demand.

A Demand will most likely be made by a Faction that is part of the Majority of your Political Body (parliament, senate, politburo). In other words, only the Factions that did well in the elections are likely to make Demands. This is because it is easier to Demand things with a majority in your Political Body. A Minority Faction has 4 times less chance to make a Demand in a Parliament, 2 times less in a Senate and notably no difference in chance in a Politburo.

Their Demands can be very varied, but your Decision is always between (a) refusing the Demand and taking a medium hit or (b) accepting the Demand and become burdened with a problem you have to solve before a deadline.

Accepting all Demands might seem the cleverer course of action but the hit you take if you eventually fail to deliver on a Demand is much bigger than if you refuse the Demand on the outset, at the moment when it is made.

Maximum Active Demands

- If you have a Parliament, the maximum is 3 Demands.
- If you have a Senate, the maximum is 2 Demands.
- If you have a Politburo, the maximum is 1 Demands.

This means that the more democratic you are, the more you'll have to deal with Demands from your Factions.

5.8.10.7. FACTION CANDIDATES

Now and then, especially if the Faction does not have many (or any) member Leaders in the Reserve Pool, they'll suggest hiring a candidate of their selection.

Refusing this will lower the Happiness of the Faction. Accepting it will give you a free Leader, but probably not a very good one.

5.8.10.8. REGIME FEATS LOOKING FOR SPONSOR

If your Regime has Regime Feats based on a Profile that is not on the agenda (Faction Profile) of any of your Factions, the Regime Feat will start looking for a sponsor.

There is about a 10% chance per turn that the Regime Feat finds a sponsor.

It can also increase the existing Profile of a Faction further.

5.8.10.9. FACTION PROBLEMS

Factions can become dissatisfied.

This can happen due to a Faction's Happiness dropping below 60.

The chance of such a problem being generated is modified downwards by the percentage of your Leaders that adhere to the Faction and the percentage they took of the last vote. So smaller Factions generate fewer problems.

The problems caused by a Faction can be diverse, but will mostly focus on an existing Regime Feat that the Faction feels strongly about.

5.8.10.10. FACTIONS DISAPPEARING

When you have too many Factions for too few Leaders, or Factions without members they'll disappear and fade away in the mists of time.

5.9. SPECIAL STORY MODULES

The Story Modules have been designed to be Modular. This is because we'd like to give players the option to turn them on or off.

Keep in mind that turning a Story Module on does not always ensure that it will materialize. But usually it will, eventually.

Below follows a quick overview of the current Story Modules:

5.9.1. CRIME SYNDICATE

You have a higher chance to have a Crime Syndicate becoming active during your first 10 rounds of play. But after they can still appear (or re-appear after being destroyed).

The higher your Enforcement Profile the less chance you will have that a Crime Syndicate is created in one of your Zones. From Enforcement score 60 and above it will never happen.

5.9.2. CORPORATION

You have a higher chance to have a Corporation becoming active during your first 10 rounds of play. But after that a Corporation can still appear (or re-appear after being destroyed).

The lower your Commerce Profile, the less chance to have a Corporation trigger. From Commerce score 30 and below it will never happen.

5.9.3. CULTS AND SECTS

This Story Module will always trigger on Round 1.

5.10. UNITS

Units represent your military forces in the field. There are several different kinds of Units you can find in the game. They range from highly organized to more chaotic groupings, but what they all share is the ability to conquer territory for their owner as well as having the ability to do combat.

5.10.1. NON-REGULAR UNITS

These are usually not under your complete control. If they are, you can move them around, but their Replacement Troops and Supply Items will be autonomously delivered to your SHQs.

5.10.1.1. ALIEN LIFEFORM UNITS

The Planet you are on might have (large) Alien Lifeforms that could impact your Population and Troops. If this is the case, some of the alien wildlife will form its own Units and (instinctively) defend their territories from potential conquerors.

Alien Lifeform Units do not need Supply.

The strength of alien wildlife is different from Planet to Planet, but usually it is quite an easy task for a modern military force to slaughter a horde of alien critters.

5.10.1.2. MARAUDERS

These are unorganized bands of the more savage kind of Human survivors. They are usually on the move and they'll not bother the local alien wildlife (and vice versa).

They do not need supplies. They might attack, you or pass you by.

They tend to hole-up in Free Folk settlements.

5.10.1.3. MILITIA

These are the Units of semi-organized private militaries consisting of volunteers. Their Units can only be put under command of one of your SHQs. They can thus not benefit from Posture Stratagems and OHQ Leader Skills.

Each Militia Unit belongs to a specific Zone. It is that Zone that will provide it with Replacement Troops from its Militia Pool when losses are suffered. However, Militia forces present in SHQ show solidarity with Militias from other Zones if they have the same Culture. This means that replacement Militia Troops from Zone A can be send by way of SHQ to a Militia Unit of Zone B.

The maximum Militia size of a Zone is based on the Population number and Militancy Level of the Zone. There is no penalty for exceeding this limit except for initially decreasing Militia recruitment and eventually a stop of further recruitment.

If no losses are suffered by existing Militia Units, the Militia Pool forces will be used to equip and field fresh Militia Units. These will appear at the Zone's City.

It's quite common for Militia Units to differ from each other as there is little respect for exact TOEs (tables of organization and equipment) in most Militia forces.

Minors start with their own equipment, the Stats of which will very slowly improve over time and will always keep to a certain R&D strength level. This is to model the Militias picking up on gradual Tech advances that are Planet-wide. They will never be at the cutting edge, but they will grow stronger over time.

Major Regime Militia will be able to produce (licensing and second-hand sales) their own versions of Models older than 5 Earth Years (30 Rounds)

of the Regular Military. The Militias always tend to stay with the lower versions of regular equipment... Any Protectorates or Vassals you have do also gain access to these older Models due to this rule.

Some Minors can gain replacements by diminishing the Population in a Zone.

There are slightly different rules for Militia forces depending on the Regime that they are loyal to:

MILITIA TYPE	SUPPLY	REPLACEMENT TROOPS	NOTE
Minor Regimes without City / Non-aligned / Rebels	Always arrives	Always arrive	These live off the land… scavenge, recycling, plunder. Their Troops infiltrate easily through the lines to send replacements or supplies.
Minor Regimes with Cities	With land connection to City over friendly Hexes	With land connection to City over friendly Hexes	Consider them to have unseen logistics and hidden centres of production and scavenging.
Major Regimes	Militia sends Supply items to City. (it will only send supplies for Units that have a land connection with the City)	Militia sends Replacements to SHQ. (it will check which are still in reserve before sending more) (it will only send replacements for Units that have a land connection with the Zone's City)	And it is your regular Logistical Network that will distribute these items to the Militia.

5.10.1.4. MINOR REGIME UNITS

These are very similar to Militia Units, but they make up the military of a Minor Regime. They also use a Militia Pool for replacement Troops and creating new Units. Not all Minor Regime Units require supply, however if they do, they'll need a connection to the Zone City they came from.

5.10.1.5. REBEL UNITS

These are also very similar to Militia Units. But instead of using a Replacement Pool they depend on Events to get new Units. Rebel Units are considered to have their own hidden methods of supply using a covert Logistical network. Hence, they are always in supply.

5.10.2. REGULAR UNITS

These are your organized military Units. Normally over time the Regular Units will become your real military force.

They are either part of Formations (multiple Units and an OHQ) or they are Regular Independent Units.

5.10.2.1. FORMATIONS

Formations consist of an Operational HQ (OHQ) and a number of subordinate frontline Units.

Formations can be reinforced with a limited number of auxiliary independent Units.

Formations can have their own Commander in the Operational HQ and thus frontline Units of a Formation can gain substantial bonuses compared to Units fighting directly under a SHQ.

You can raise Formations of different Types depending on your progress in Discovering and Operationalizing Formation Types using the Staff Council.

5.10.2.2. REGULAR INDEPENDENT UNITS

These are also Regular, but they are without larger formation and are thus named Independent Units.

You can keep them directly under SHQ or assign them to Operational HQs to boost a Formation in a specific strength (like artillery or anti-tank).

The latter you can only do if the size of the Independent Unit is the same or smaller than that of the Formation Type you are attaching it too.

Regular Independent Units usually become directly available upon you having developed your first Model of a specific Model Type. For example: Once you have designed your first Light Tank Model the Independent Light Tank Formation will become immediately available.

5.10.2.3. REGULAR SOLDIERS' PAY

Soldiers should be paid a reasonable wage otherwise they might tend to have a rather low Morale.

Keep in mind it is not only the sign-up bonus that determines recruitment speed, but also the salary they'll be paid that has an impact on the Soldiers' Morale.

If Units pay is skipped in any turn, they'll lose 20% of their Morale. So always keep an eye on your Treasury.

5.10.2.4. BATTLE GROUPS

These are Regular Units, but of an improvised nature. Comparable with Kampfgruppen or Task Forces. They allow flexibility in their TOE (Table of Organisation and Equipment) but they have several downsides.

Galactic Republic equipment Units (GR) also enter your service as Battle Groups.

Battle Groups can be disbanded for their Troops to return to SHQ and be redistributed to other Units as Replacement Troops.

Battle Groups tend to break when they suffer a panic retreat during defense.

Battle Groups (but not GR equipment) suffer a small penalty on attack values (due to reduced organisation and to not give the incentive to put too many units in BGs). Battle Groups need at least 3 subunits to be transferred to be formed.

5.10.3. HEADQUARTERS

5.10.3.1. STRATEGIC HQ (SHQ)

These are of the utmost importance. The SHQ is the link between your economy and your military. The SHQ receives production (and Recruits) from the Zones and you can use those Items to send supplies to Units and to raise new Formations.

An SHQ should have a Commander. Its Commander can provide the High Command Skill Roll used by any Unit in combat.

5.10.3.2. OPERATIONAL HQ (OHQ)

These OHQs provide leadership to the Units in its Formation.

Operational Commanders

You should assign a Commander to all your OHQs. The Commander can perform a myriad of Skill Rolls when their subordinate Units are in combat.

A Skill Rolls that any OHQ Commander always makes is the Operational Command Skill Roll. Depending on circumstances, the Commander also always rolls either an Offensive Tactics or Defensive Tactics Skill Roll.

Then, depending on the Troops in combat, there will also be Skill Rolls for Tank, Gun and/or Infantry Tactics.

Postures

You can use Posture Stratagems to give a Posture to each Formation. It is highly recommended you do so, since this can give significant bonuses. But also be weary of any penalties given be the Posture.

To get access to most Posture Stratagems you need to have a Staff Council (Organization).

OHQ Range

For Units to receive positive effects of Skill bonuses (or penalties) the Unit needs to be in range of its OHQ. If HQ Power is 100% a good Skill Roll always works, if HQ Power is 0% it never works.

SHQ for its High Command Skill Roll is always in range.

Switching HQs

If you switch an Independent Unit to another HQ this will cause a 30% Readiness drop for the switched unit.

If you switch an OHQ to another SHQ this causes a 15% Readiness drop for all OHQ units."

5.10.4. COMMANDERS

Besides Combat bonuses by Skill Rolls, Commanders provide many other benefits, including effects on Morale an Experience Growth.

Leaders can also die due to being present in a Hex or Unit that sees combat. Commanders can die while directing combat operations of their subordinate Units.

5.10.5. TROOPS

Any Unit contains a certain ideal number of Troops (paper strength TOE) as well as a number of Troops actually present.

Each Unit can have a number of different kinds of Troops inside it.

For each Troop Type in the Unit the following data is stored:

- Model
- Readiness
- Morale
- AP
- Entrenchment
- Experience
- Culture
- Veterancy Class

5.10.5.1. EXPERIENCE

Experience points are one of the most important stats of your Troops. They give a big combat modifier.

Your Regular Troops have one of the following Veterancy Classes: Green, Regular, Seasoned or Veteran.

Militia Troops have the same classes except for Green, Militia is presumed trained before being send into the field. Something you'll have to do yourself with your Regular Troops.

Robotic forces do not gain XP.

Veterancy Promotions

To have Troops promote from one Veterancy Class to another, you need a minimum number of Experience Points (XP). Below sets out the chances for such a promotion:

FROM LEVEL..	5% CHANCE ABOVE	10% CHANCE ABOVE	20% CHANCE ABOVE	40% CHANCE ABOVE	80% CHANCE ABOVE
Green	30xp	34xp	38xp	42xp	46xp
Regular	50xp	54xp	58xp	62xp	66xp
Seasoned	70xp	74xp	78xp	82xp	86xp
Veteran	n/a	n/a	n/a	n/a	n/a

Free Experience Points

There is free Experience gain without combat up to around 20 XP.

This can be (much) higher if you have Experience Classes Regular, Seasoned or Veteran present in the Unit.

It can also be higher if your Relation with the Commander is >50 (and inversely lower if Relation is lower<50). Relation plays an important role in the willingness to make a maximum effort.

Basic increase per round is +2 XP, but this can be higher if you have non-Green Veterancy Class present in the Unit.

It can also be higher when certain Postures are chosen for the Formation like "Field Training".

Veterancy Levels

These levels bring specific extra benefits. Notably, the benefit that the Unit with more Veteran Troops in it will be better able to train newly arrived green replacement Troops.

VETERANCY LEVEL	EXTRA TRAINING POINTS PER ROUND	HIGHER TRAINING MAX	BASE MORALE	EXTRA MORALE RECOVERY
Green	0	0	0	+0
Regular	+2	+10	+10	+1
Seasoned	+4	+20	+20	+2
Veteran	+8	+30	+40	+4

Note that Militia Veterancy effects are on step lower than Regular Troops Veterancy effects. Veteran Militia will thus use the effects for Seasoned Troops for example.

The higher the Veterancy Levels in your Unit the more likely they'll stay high when the Unit is sustaining low to moderate losses and receiving Green Replacement Troops.

For example, a Unit with 2,000 Veteran infantry loses 200 of its infantry and gets 200 new Green infantry assigned. The training XP maximum will be put at (2/20 * 20 XP) + (18/20 * 50 XP) = 47 XP and growth will be at (2 * 2/20) + (10 * 18/20) = +9XP extra growth per round. So within 5 rounds, those Green replacements will be Seasoned due to the coaching and good example and instructions given by the Veterans.

5.10.5.2. MORALE

There is a Base Morale value and a High Morale value. Troops automatically climb towards Base Morale. And automatically descend towards High Morale.

Robotic forces always have Morale 100.

5.10.6. UNIT FEATS

It is possible for Units to acquire Unit Feats. Unit Feats denote individuals or small teams that are aiding your Troops.

You can also receive Unit Feats through having certain Regime Feats as well as through Decisions and some Stratagems.

Each Regime Feat gradually supplies your Regular Troops with a certain ratio of Unit Feats.

If there is a spot available for a Unit Feat, there is a chance a new one will be added. Note however, that your Regime Profile Level for the Regime Feat supplying the Unit Feat influences this chance significantly.

- Profile 100 gives a 100% base chance

- Profile 75 gives a 50% base chance
- Profile 50 gives a 30% base chance
- Profile 25 gives a 15% base chance

The chance is negatively modified the closer you are to the maximum number of Unit Feats of a specific kind as well as for the total maximum number of Unit Feats (1 per Subunit (100 Infantry/10 Tanks)).

The important thing to remember here is that it can take quite a lot of time before a Regime Feat supplies all Units with its Unit Feat.

The total number of Unit Feats in a Unit cannot be larger than the total amount of Subunits in a Unit.

In combat, a Unit Feat embeds itself to one or more Subunits. These Subunits will receive and benefit from its special effect.

Unit Feats are attached to the Unit and do not return to SHQ when the Unit is disbanded.

Unit Feats can be lost when the Subunits they are embedded with are lost in combat.

Acquiring Unit Feats

You can only acquire a specific Unit Feat if your Regime has its Regime Feat, the People in a Unit are your Regimes' own People Group and it does not concern Robots or Minor allies.

The maximum number of Unit Feats present in a Unit is equal to the total of Subunits (1,000 Soldiers = max 10 Unit Feats).

Losing Unit Feats

You'll always lose Unit Feats if the Unit has fewer Subunits than Unit Feats.

Furthermore, over time you'll lose Unit Feats if the Regime Feat they are linked to no longer exists.

Last but not least, any Subunit that gets killed in combat also loses its attached Unit Feat. The Unit Feats are not invincible!

5.10.7. SUPPLY RESERVES AND UPKEEP

No bullets, no offensive. No Fuel, no movement. No Food, no Soldiers. You really need your supplies!

At the start of a turn, your Units will demand Supplies from their SHQs and probably be sent some. After they will consume their Upkeep.

Most Units will be able to store some Supply reserves, so they can stand to miss a turn of Supply.

Supply is sent directly to Units from an SHQ or is picked up by the Unit's Operational Logistics on a road close by where the SHQ sends the Supply to.

5.10.7.1. AMMUNITIONS

At the start of every battle, the remaining Ammunition (Ammo) is parcelled out to the Subunits of each Unit. If there is plenty of ammunition available, no penalties apply. However, if there is not enough Ammunition the following penalties will apply:

COMBAT ROUNDS OF AMMUNITIONS LEFT	OFFENSIVE ATTACK POINTS COMBAT MODIFIER	DEFENSIVE ATTACK POINTS COMBAT MODIFIER
>=10	1.0	1.0
8	0.84	0.866
6	0.68	0.733
4	0.52	0.6
2	0.36	0.4666
0	0.2	0.33

Combat rounds deducted from the stores is 2 less than the total rounds the battle lasted, but always at least 1 combat round.

5.10.7.2. FUEL

At the start of a round, the Action Points (AP) available are lowered if not enough Fuel to move 10 Hexes is present. Every Hex costs Fuel.

At the start of every battle, remaining fuel is parcelled out to the Subunits of each Unit.

If there is plenty of fuel available, no penalties apply.

Fuel is much less important for the defending side than the attacking side.

COMBAT ROUNDS OF FUEL LEFT	OFF. ATTACK POINTS COMBAT MODIFIER	DEF. ATTACK POINTS COMBAT MODIFIER
>=10	1.0	1.0
8	0.82	0.9
6	0.64	0.8
4	0.46	0.7
2	0.28	0.6
0	0.1	0.5

Combat rounds deducted from the stores is 2 less than the total rounds the battle lasted, but always at least 1 combat round.

For example, if there are 2 combat rounds, you pay for 1 combat round, if there are 9 combat rounds, you pay for 7 rounds.

5.10.7.3. FOOD

If full Upkeep is provided, Hunger will be reduced by 50% and at least 50 points.

If full Upkeep is not provided, the percentage missing will be added to the Hunger score.

However, the max Hunger score that can be reached is Food % missing * 300.

The maximum Hunger score is thus 300 if you are completely out of supply. However, if you are still receiving half of the Food needed the maximum Hunger score will be 150.

Food Supply range exception rule

Also keep in mind the exception rule that Food is supplied at 100% of request even if the Unit is at the outer edge of picking up supplies. It is thus possible, for example, for a Unit to receive 100% of the Food requested but only 25% of the Ammunition requested.

Supply Consumption Percentage

Supply Consumption Percentage is equal to 100 - (Hunger / 3).

A percentage lower than 100 has a very big impact on combat efficiency. You should always at all costs prevent your Units from going Hungry.

Effects of Hunger

Depending on the Hunger score, the following negative effects kick-in:

HUNGER SCORE	MORALE LOSS	READINESS EFFECT	STARVATION LOSS
0	5 points gained until Base Morale reached	20 points increase	0%
0-100	0-10% loss	10-20 points increase	0%
101-200	0-20% loss	Lose 10% until 60 points, below 60 gain of 5-10 points	0-10%
201+	0-30% loss	Lose 20% until 30 points, below 30 gain of 0-5 points	0-20%

Once all Troops in the Unit have starved, the Unit is removed from the map (This however does not happen for SHQs, which can exist without Troops).

5.10.7.4. EXTRA COSTS

Extra Fuel, extra Ammo and extra Food costs or Food reductions can be caused by Postures.

5.10.8. OPERATIONAL LOGISTICS

Supply does not have to be delivered to the doorstep of a Unit. All your Units have their own Operational Logistics that they can use to pick up Supplies send by an SHQ to the nearest Road Hex.

This Operational Logistics represents the Unit or its HQ having some Troops and/or equipment assigned to picking up supplies from a delivery point.

Units have an Operational Logistics Range of 100 AP. Which is quite high.

The number of AP the Unit is away of from the pick up Hex determines the percentage of requests made by the Unit that can be received. Up to 100 AP away from the source, the Unit will be able to receive 100% of its requested Supplies. At 150 AP range, it will be able to pick up 50% and at 200 AP or beyond, the pick up point is out-of-range for the Operational Logistics of the Unit.

LANDSCAPE / RIVER / RIDGE / CANYON / ROAD	OPERATIONAL SUPPLY AP COST
Plains	12
Low Mountain	20
High Mountain	40
Marsh	20
Forest	20
Heavy Forest	20
Tundra	20
Low Mountain Forested	20
Savannah	15
Rainforest	20
Cloud Forest	20
Urban	12
Agricultural	12
Dirt Road	N/A
Sealed Road	N/A
Small River	+10
Med River	+20
Large River	+30
XL River	+40
Escarpment	+20
Canyon	+40
Frozen Rivers	0

5.10.9. REPLACEMENT TROOPS AND QUALITY LEVELS

Yes, your Units will probably suffer losses at some point. If you have Troops in your SHQ, these will be automatically send to your Units that are in need of those replacements.

However, there are some special settings available that influence the dispersal of Replacement Troops.

5.10.9.1. QUALITY LEVEL OF MODEL AND FORMATIONS

You can assign a quality level to a Model by going into the Management Screen and going to the Model Tab.

The Quality Levels that can be assigned are:

- 0: Not Set
- 1: Obsolete
- 2: Low
- 3: Regular
- 4: High
- 5: Elite

Furthermore, you can assign per Formation and per Quality Level if they are Allowed in the Unit, or Tolerated or Disallowed.

Allowed: Will be send as Replacement Troops.

Tolerated: Will not be sent as Replacement Troops, but if any are present they are not sent back to an SHQ either, unless they can be swapped with "Allowed" Quality Level Troops present at that SHQ. This makes "Tolerated" the ideal Unit setting for a Quality Level you want to slowly phase out from the frontlines.

Note that when this swapping happens it is treated as if the troops were being replaced and thus the soldiers stay in place but their equipment is swapped.

Disallowed: Is never sent as Replacement Troops and if any Models with this Quality Level are present, they'll always be sent back to an SHQ. Quality level Obsolete is always treated as Disallowed. Be careful with using Disallowed as it could completely strip your Units of Troops. There is no subtlety with this setting. For subtlety use "Tolerated."

You can set Quality Levels to be only Formation wide, meaning a multi-unit Formation has the same Quality Level for all its Units. An exception here are attached Independent Units which have their own Quality Level settings.

These mechanisms allow you, if you would want to, to concentrate your best equipment on a limited part of your forces and keep, for example, garrison forces or secondary fronts with Models on a lower technology level.

Obsolete Quality Level equipment and Troops will always be sent back to SHQs.

5.10.9.2. REPLACEMENT PERCENTAGE

You can set at what percentage of Troops left (Integrity) the Unit / OHQ starts to ask for Replacement Troops.

Normally this is set to 100% and a Unit will always ask for Replacement Troops, no matter how small the losses incurred.

If you have many Units that need Replacement Troops, you can set some Units to a lower percentage (down to 25%) to prioritize others.

5.10.9.3. SENDING OF REPLACEMENT TROOPS

If a Quality Level is allowed to be used and the Logistical Points are still available, Troops will be sent from SHQs towards OHQs and Units.

Only Quality Levels that are Allowed for the Formation are sent to Units of that Formation.

5.10.9.4. RETURNS OF TROOPS

If a Quality Level is Disallowed and Logistical Points are still available, Troops will be sent from Units / OHQs back to the SHQ.

5.10.10. FORMATION TYPES

The difference between Regular Formations and Militia Forces is that the latter are just thrown together as seen fit. The secret of battlefield supremacy is concentrated and detailed planning and calculation to make sure the logistics and the organization is a fluid and optimized machine. That's why you need to actually Discover Formation Type ideas and then actively Operationalize them.

5.10.10.1. RAISING NEW FORMATIONS

You can choose to build a new Formation from scratch or to use Troops already present at an SHQ. Or you can opt for a mix.

You need to have at least 50% of the Items and 50% of the Logistical Points required to raise the full Formation.

Item cost

You'll need to pay the Recruits, Metal Items and Industrial Points costs of the part of the Troops you are constructing.

But you'll also need to pay their initial supply stockpiles of Food, Ammo and Fuel or Energy Items.

PP cost

Raising new Formations costs PP.

As a rule of thumb, Formation Types are more efficient PP cost wise than Independent Regular Units. And as another rule of thumb larger sized Formations are more PP cost efficient than smaller ones.

Building from Scratch

Uses best version of each Model Branch if it is in an accepted Quality Level for the Unit.

If multiple Model Branches fit the same Reinforcement Type, a mix is made.

Using SHQ Troops

SHQ Troops from a Model with Quality Level Obsolete cannot be deployed or constructed

SHQ Troops use Logistical Points to arrive at the target Hex where the Units are raised, but since they are already pre-produced, they'll not cost you any Items.

When using SHQ Troops, you can choose which Veterancy Levels to use.

Upon Raising

When raised, the Unit will use the Quality Level settings flagged upon finalizing the raise.

5.10.10.2. UPGRADING AND DOWNGRADING OF FORMATIONS

You can upgrade to anything in the Formation Type Tree that directly uses the current Formation Type in its prerequisite list and whose whole prerequisite list checks out as well.

You can downgrade to anything in the Formation Type Tree that the current Formation Type has in its prerequisite list and whose whole prerequisite list checks out as well.

Upgrading and Downgrading costs PP.

Upgrading costs the specified cost of the new target Formation / 2, but minimum 1 PP.

Downgrading costs the specified cost of the new target Formation / 3, but minimum 1 PP.

Immediate effects of Up or Downgrade

There is no immediate effect. But next round Replacement Troops will be requested and/or Troops will be returned.

5.10.10.3. MANPOWER REBATES

Trucks / APCs and Recon Buggy Model Types return some manpower back to SHQ after their deployment from the factory. This models the return of mechanics, instructors, logistics and factory teams. Thus defacto Trucks use only 20% of stated manpower, APCs and Recon Buggies only 33%. This rule also results in less manpower returned on disband and less food consumption. Militia trucks and buggies do not profit from this rule as they operate with more troops and retenue. The manpower rebates stated are averages and dice rolls are made so there might sometimes be less rebate, especially if you are raising very small quantities of troops.

5.10.10.4. CUSTOMIZING FORMATION TYPES

Your Staff Council has a Customize Formation Types Task. If you allocate BP to it you'll start amassing Customization Points. These can be used to call the Director of the Staff Council and instruct him to customize an existing Formation Type.

Customization makes it possible to organizationally deviate from the fixed Formation Types discovered and operationalized by your Staff Council.

Your customization freedom is limited. You will have to think hard about any customization you'll want to make as you can only make 1 change at a time. And at a possibly steep cost in Customization Points.

Both Individual and multi-Unit Formation Types can both be customized. Even customized Formation Types can be further customized. The latter however comes at an increasingly higher cost as you'll customize upon customization.

The player can customize Formation Types by adding Reinforcement Types to an existing Formation Type. Up to half its current complement counted in sub-Units can be added. So for example a Formation Type with 1000 Infantry could be customized to get an additional 500 MG, but not 600.

A limitation of this process is that the customization only affects the non-HQ Units and that you can not add Trucks or APCs to any Formation Type. However if a Formation Type that you are customizing already has either Trucks or APCs these will then be increased or decreased if you added Troops that needed transport. The maximum number of different Reinforcement Types a Formation Type can have is six.

CUSTOMIZING WHICH FORMATION TYPE	COST IN CUSTOMIZATION POINTS (CP)
An original Formation Type	4 * Operationalize BP cost But minimal 80 CP.
Already customized (once)	Original Cost * 2
Already customized (twice)	Original Cost * 3
Already customized (thrice)	Original Cost * 4
etc.	etc.

After you have customized a Formation Type it will appear in your Formation Types listing and you can raise new Formations based on it. It is also possible to upgrade on-map Formation Types of the original type to the customized Formation Type.

5.10.11. REPLACING TROOPS

If it is a Model that is "replaceable," you can select a Troop Type in the SHQ that is of the same Reinforcement Type.

It is basically switching equipment around while leaving the Soldiers in place (respectively at SHQ and in the frontline Unit). It is a good way to get newer equipment to highly experienced frontline Units.

You need to have enough Logistical Points for this operation. The weight cost of the replaced and the replacing equipment is added up.

And the equipment will be changed around between the two groups of Soldiers, so each will keep their original Subunit statistics.

The logistics take the Unit's Operational Supply Range into account, but the Unit needs to find a pickup Hex in 100% Operational Supply range.

Since different Cultures or Veterancy Levels could be present at SHQ, which could all be used for the replacement operation, the player needs to select which Veterancy Level to use if multiple are available.

At the moment everything except Infantry, MG and RPG can be replaced.

5.10.12. UPGRADING TROOPS

If it is a Model that is "upgradeable," you can select another Model of the same Model Type you designed to upgrade it (note: target Model must be same or better quality level or without quality level set).

Upgrading is basically upgrading the current equipment to a newer standard. It is thus very different from replacing Troops.

The cost is the difference of the cost between the two Models + 33% of the cost of the new Model (excluding recruits though). It is thus relatively expensive to use "Upgrade". Imagine a MG mkI costing 10 Metal and a MG mkII costing 20 Metal. Upgrading MG mkI to MG mkII would then cost 17 Metal. If you would not have upgraded and just bought a new MG mkII you would have had the same result, but the old MG mkI is still available as well, at only a cost of 3 Metal extra.

The logistics takes the Unit's Operational Supply Range into account, but it needs to find a pickup Hex in 100% Operational Supply range.

At the moment only Infantry, MG and RPG can be upgraded.

5.10.13. DISBANDING AND SCRAPPING

If you set a Unit to Disband, its Troops will be returned to SHQ. The Troops (Subunits) itself will continue to exist.

Scrapping is much more radical than disbanding and allows you to specify a quantity to scrap.

These Troops will disappear instantly.

Their original Recruit Item will be used to add Population to the Zone if the Zone has City. If not, it will be added to its Hex (an adjascent Hex with a Free Folk settlement).

If the Zone has a City, the Unit's supplies (Fuel, Food, Ammo, Energy) will be added to its Zone inventory fully.

And 50% of Metals, Rare Metals, Machinery and other construction costs will be recovered.

If a Unit has no Subunits left after a scrapping operation, it will disappear immediately.

5.10.14. MOVEMENT

Moving Units costs Action Points (AP). The cost of movement depends on the movement type of the Unit and the Landscape Type that the Unit is entering. The cost of moving can be increased by entering enemy terrain and enemy Zone of Control (ZOC) points, battle delay points, or Rivers without roads over them. The cost of moving can be diminished by travelling over roads.

When a Unit moves, it does so with the range of the slowest Troops it contains. The range of the slowest Troops can be increased, however, if the Unit contains Troops capable of carrying slower Troops.

5.10.14.1. MOVING INTO AN AMBUSH

It is possible that due to the Fog of War, you might move into an enemy-occupied Hex without your knowing it. In this case, your Unit will be ambushed, and surprise combat initiated. Something best avoided as you will fight with big penalties.

5.10.14.2. FREE MOVEMENT

If you have won a battle, your Units will be able to freely move into the Hex in which you battled without spending any additional AP. This is because the AP to move in was already spent in battle.

5.10.14.3. READINESS LOSS WITH MOVEMENT

Foot movement takes a 30 Readiness hit for 100 AP marched. Wheel and Tracked takes only 10. And this includes any infantry passengers along for the ride.

5.10.14.4. BATTLE DELAY AND OTHER AP PENALTIES

After a battle has been won, a Battle Delay penalty may be incurred for any Units trying to move into or through the newly opened Hex. This penalty takes place if a battle took more AP to win than it took the Units that participated in the battle to move into the Hex.

Battle Delay points simulate the delaying effects of an effective defence. Imagine that all the Units are moving at once instead of taking turns. If a Unit used all its AP to do something, it took the entire round to do it. This means that if, for example, at the end of a round a roadblock was cleared, the other Units had to wait until that point in the round to move. Consequently, they should have fewer APs left for movement.

5.10.14.5. ZOC

Moving into a Hex that was occupied by the enemy at the start of turn costs you 10 extra AP. Moving into a Hex adjacent to an enemy Unit costs 10 extra AP. If doing so while crossing a River, it costs 20 extra AP instead of 10.

ZOC points of Units you do not see do not give rise to extra movement cost. This is done to not give their presence away.

Units that are out of supply exert no ZOC.

5.10.15. COMBAT

The moment battle commences, all Troops are split up as Subunits (aka as individuals, about 100-man or 10 tanks per Subunit). These Subunits then battle it out for several rounds, each round costing 10 AP. The moment an attacking Unit is out of AP, it ceases its offensive combat.

If you want to know exactly who attacked whom, you may check theCombat Detail Popup. The attacker compares his attack score to the hit point score of the defending Subunit. If they are equal, there is a 50% chance of a hit. If the attacker has twice the points, there is 75% chance of a hit; if the defender has twice the score, there is a 25% chance of a hit, and so on. The attack score depends on which troop type is attacking with which other troop type. For example, tanks have different attack scores for soft and hard targets. A Unit will retreat if it has more losses than its Posture tolerates or because it has had so many losses that it panics. When all attacking Units have retreated, the battle is over, and the attack has failed. When all defending Units have retreated, the battle is over and the attacker wins. If it is a Ranged Attack, the attack continues until the attacker is out of AP.

When Combat starts the combat loop is started.

5.10.15.1. COMBAT LOOP

The combat loop basically plays combat rounds until either the attacker has retreated, been wiped out or is victorious. The combat round starts at 0 before going into the first Combat Round. The following things happen in the following order:

Add Combat Round
Combat round increases.

Initiative
Only in the first round every Subunit gets a random initiative between 0 and its initiative score. The Subunits with highest initiative will come first in every subround.

Check Capitulation
Only defenders have a chance to capitulate. And only if they are retreating or have retreated. If a Subunit's Morale is lower than 25 and Readiness is lower than 50 then there is a chance it capitulates.

Attackers always capitulate when combat round 30 has been reached. This can happen on very rare occasions, like with the so called "rebel combat."

Set Concentric Bonus
Every combat round it is again calculated because Units might have retreated in the first combat round and that might severely reduce the bonus given by concentric attack. The Concentric Bonus will be halved if Units from multiple HQs are involved.

ATTACK FROM X HEX SIDES	CONCENTRIC BONUS
1 Side	0%
2 Sides	10-40%
3 Sides	40-80%
4 Sides	80-100%
5 Sides	150%
6 Sides	200%

Combat Steps Loop
Do the actual combat for this round. All Subunits attack each other. See further down for a detailed breakdown of the Combat Steps Loop.

Check auto destroy
If a Subunit with the auto destroy property has done at least 1 attack, it is destroyed now.

Check out of AP

Depending on the type of combat, the following happens. If the attacking Unit does not have enough AP left to pay for the next combat round (10AP) it retreats.

Check Breakthrough

If a Subunit is not hit for 2 combat rounds and made at least one successful attack (a hit!) it will break through. Also, if the Subunit attacker has not even been targeted (let alone hit) in the last 2 combat rounds, it will break through. There is a chance the breakthrough fails if the attack is overstacked. The defender has no non-backbench Subunits left, the breakthrough always succeeds.

Check Safe Retreat

If a Subunit started retreated in combat round X, it will have safely retreated in combat round X+2. In effect it suffers 2 combat rounds of possible enemy fire without being able to return fire.

Check Panic Retreat

If % of the Subunits remaining of a Unit drop below the Morale of a Unit, then there is a chance it will do Panic Retreat.

Units that have no avenue of retreat have their Morale doubled for this calculation.

If the Unit does a Panic Retreat but there is no avenue for Retreat for the Unit, all Subunits will Capitulate.

No Panic Retreats are possible in Ranged Attack.

Check Orderly Retreat

If % of kills + retreats suffered by a Unit triggers the retreat % of a Unit, then it will do an Orderly Retreat.

Units that have no avenue of retreat will not be able retreat. And will probably eventually suffer a Panic Retreat.

No Orderly Retreats are possible in Ranged Attack.

Check Combat Victory

Here it is checked whether the battle has ended. First the number of Subunits still in combat are counted on both sides.

- If there are no attacking Subunits left and still defending Subunits left, the defender has held.

- If there are no defending Subunits left and still attacking Subunits left, the attacker has won.
- If no Subunits are left on either side, it is a Stand Off.

Note that in the case of a Ranged Attack, the attack always continues until the attackers run out of action points, even if there are no defenders left.

When the end of the battle is reached, structural damage is given to Assets and, in case of use of Nuclear Weapons, also to the Populace.

Retreats

Unless no retreat is possible, surviving Units of the losing side retreat. Attackers go back to where they came from. Only defending Units that were stationed in the lost Hex will retreat to a different Hex. The Hex they will choose to retreat to will be the one in the opposite direction of the angle of attack. So if a Unit is attacked from the north, it will retreat to the south.

A Unit can never retreat into a Hex that it could not move into with 100 AP.

5.10.15.2. COMBAT STEPS LOOP

This is called every combat round. In this phase, all Subunits will keep doing 1 attack each in order of their initiative sorting. Each loop cycles through all Subunits and is called a subround. We keep doing subrounds until no Subunit has attacks left.

Determine stacking

In every subcombat round, stacking is recalculated. So what might start as an overstacked attack might quickly, due to casualties, become an attack without penalties. The maximum stacking without penalties depends on the Concentric Bonus.

Maximum Stacking

For the defender, the maximum stacking is always 100. For the attacker, it depends on the number of sides you are attacking the Hex from:

ATTACK FROM X HEX SIDES	MAX STACKING
1 Side	100
2 Sides	100
3 Sides	150
4 Sides	200
5 Sides	250
6 Sides	300

Battle Stack

Keep in mind that previous battles may have left Battle Stack points on the target Hex and the Battle Stack points are added to the attacker's Stack Points, making it easier to exceed stacking limits.

Scroll through all Subunits

As already explained above, we cycle through all Subunits and then test for each one whether it can attack. It can attack if it has made fewer attacks this combat round then its statistics allow. Furthermore, the Subunit must not be in the process of retreating.

Find a target

Then (semi)randomly an opponent of the enemy side is chosen. Semi random because the randomness depends on the number of tries the Subunits statistics allow. If it has only 1 try in finding its favourite target, it is purely random. But if it has more tries it will pick the target it likes the most. A Subunit can only attack an enemy backbench Subunit if the attacking Subunit has either accomplished a breakthrough or if it has artillery range. Furthermore, artillery capable Subunits cannot fire on enemy Subunits that have broken through.

Find preventer

It is possible the target Subunit is of a type that another Subunit from that same side wants to defend. This may lead to the "preventer" being attacked instead of the original target.

Subunit attack

The actual attack is now done. See below for the details of an actual Subunit attack.

Subunit counter attack

The attacked Subunit will now counter attack its attacker. If the attacked Subunit has already been attacked more often than its max attacked score, a counter attack is not possible. A counter attack is the same as a Subunit attack except that it is less strong and modified downwards.

If the Subunit is in the process of retreating, a counter attack is not possible.

5.10.15.3. SUBUNIT ATTACK

An actual attack from one Subunit on another takes place either as a regular attack or as a counter attack. Counter attacks are lighter in effect.

Determine if hit scored

Basically, it is very simple. The attack points for the attacker and the hitpoints for the defender are calculated.

The attack score is based on either Soft Attack or Soft Defense.

The hitpoints score is based on the Hitpoints (can be different depending on whether the attacker is an infantry type or not)

Then a large plethora of modifiers is applied on both scores.

The attack score and the hitpoint score are finally both randomized and will score a value between 0 and their calculated number, and if the attacker scores higher a hit is scored, otherwise not.

Hit scored

If a hit is scored based on the statistics of the Subunit attacking, it is determined if it is a Retreat Hit, Kill Hit or Pinned Hit.

Experience Gain Modifier

The experience modifier is for both your own Subunits and enemy Subunits. The modifier is minimum 0.1 and maximum 3.

Kill Hit

The targeted Subunit is destroyed. A Kill Hit gives the Subunit scoring it 25 XP modified by the Experience Gain Modifier.

Retreat Hit

A Retreat Hit gives the Subunit scoring it 10 XP modified by the Experience Gain Modifier. The target that is hit goes into immediate retreat and loses 50% Readiness and 10% Morale.

Robotic forces cannot suffer Retreat hits and such a hit will translate in either Killed or Pinned.

Pinned Hit

A Pinned Hit gives the Subunit scoring it 5 XP modified by the Experience Gain Modifier. The target that is hit loses 50% Readiness, 50% of Entrenchment and 5% Morale.

Modifiers

A large number of modifiers will be applied to the attacking Subunit's Attack Score and the defending Subunit's Hitpoints Score.

Commander Skill Rolls modifiers

OHQ and SHQ Commanders can seriously increase the Attack Score and the Hitpoints Score. See further below for the details of how their Skills work. They'll be used often and can be decisive!

Keep in mind that each Roll is only made once per battle and that roll is applied every time it is needed for the duration of the battle. This means that in some battles, a Commander will give more modifier than in others and it adds some further randomness to combat in general.

Item stocks modifier

The Subunit can get penalties if it is low on ammo or fuel. The penalties are more severe for the side on the offensive than the side on the defensive.

Attack start up modifier

Some Model Types have limited effectiveness in the first 2 combat round when they belong to the offensive side in the battle. For Tanks this is -37% for the first round and -25% the second round, for the others it is -75% for the first round and -50% the second round.

The whole objective of the rule is to model the effect of the fact that it takes the attacker a bit of time to advance towards the enemy positions and to reach a position where they can actually start effectively attacking the enemy. That is also why tanks have less of a start-up penalty than infantry.

Counter-attack modifier

If this attack is a counter-attack then a -50% penalty is applied to the Attack Score.

Max Attacked modifier

The attack score gets modified if its target has been already been attacked more than the maximum number of times it can effectively be attacked. Attacking it double the amount of max attacked results in a modifier of 0.5. Triple 0.33, etc.

Landscape modifier

The Landscape Type can modify the attack score. Keep in mind that the defenders of the Hex get different modifiers than the offensive side.

Weapon Type Matrix modifier

Each type of weapon (kinetic, laser, beam) has quite a different performance against different types of armor.

Calibre Matrix modifier

The calibre or penetration strength of each kind of weapon has quite different performances against different thicknesses of armor. As a rule of thumb, a certain calibre does fine up till a point where the armor of its target becomes too thick.

Posture modifier

OHQ and their Formations can be set to a range of different Postures by playing a Posture Stratagem on them. These Postures can have quite a big influence on Combat results.

Readiness modifier

The effect of the Readiness modifier on the attack score of the offensive side is huge and the Readiness % is used as a negative modifier. Readiness of 25 means a penalty of -75%, Readiness of 50 means a penalty of -50%. For the defending side only 66% of its attack score is modified by Readiness. For them, Readiness of 25 thus means a penalty of -50%. For both sides the Hitpoints Score is for 50% modified for Readiness. So, with Readiness 75 that means a modifier of -12.5%.

Supply Consumption modifier

The Attack Score and the Hitpoints are for 75%, modified for the Supply Consumption percentage. The Supply Consumption percentage is only below 100% if the Unit is going Hungry (or is robotic and out of Energy).

Experience modifier

The Attack Score and Hitpoints Score is modified for Experience. Each XP point is a 1% positive modifier.

Concentric modifier

The more sides you attack from, the greater the positive modifier the offensive side will get on its Attack Score.

Surprise Combat / Ambush modifier

If the offensive side walked into an ambush, the Attack Score of the defensive side is doubled.

"Rebel Attack" modifier

If the offensive side's Units appeared inside the defender's Hex by an event, its Attack Score gets a +50% modifier.

Orderly retreating target modifier

If the target is from the offensive side and is orderly retreating, the Attack Score will be divided by 4.

Panicking target modifier

If the target is from the defensive side and it is retreating in panic, the Attack Score will be doubled.

Entrenchment modifier

The target gets 1% point bonus on its Hitpoints Score for each Entrenchment Point.

River modifier

Rivers can give the defenders an increase in Hitpoints. The attacking Subunit however must belong to a Unit attacking from such a Hex side such that it does actually cross a River.

Overstacking modifier

Overstacking means having more Stack Points in battle than the Maximum Stack Points. If you overstack, your Troops will be more vulnerable and fight less well. You can overstack in defence as well as in offence. Overstacking makes attack and defence stronger, but at the cost of higher casualty rates.

Hidden Defenders modifier

If you have low Recon on the Hex you are attacking, the Hitpoints of some of the Subunits defending the Hex can be multiplied by up to 3 times. Keep in mind however during the battle you'll quickly gain more Recon points.

Close Combat modifier

The Hitpoints Score of a "back bench" Model like Artillery will be modified with -66% if attacked by a Subunit that has broken through its lines. If the attack somehow takes place without the attacking Subunit having been broken through the modified on the Hitpoints Score is -33%.

Battlegroup modifier

If a Battlegroup (or GR) Unit has fewer than 3 Subunits in it, it will suffer a penalty on its Hitpoints. Non-GR troops in Battlegroups suffer a -15% on their attack value.

Vulnerability of Shield Generators

A Shield attacked from a distance works as it should. A Shield attacked by a broken through Subunit is very vulnerable and this Subunit will do 10 times more damage to the Shield than otherwise.

5.10.15.4. OTHER COMBAT RULES

Depleting Hit Points for Shields

A Shield starts at X HP and every turn it takes a hit.

Once it is depleted by a hit, it depends if the hit is made a broken through Subunit (in which case the Shield will be killed) or a non-broken through Subunit (in which case the Shield will retreat to hopefully fight another day).

Radiation

Use of Nuclear weapons will radiate an area up to 4 Hexes away from the combat Hex. RAD is divided by 4 for every distance point from "ground zero".

The effects of Radiation are applied at start of each turn. The initial blast for Civilians is applied at three times the Radiation level that will be there for the long term. Anti-Rad infrastructure Asset helps protect here, but Radiation Treatment Asset does not.

Successive use of Atomics doesn't lead to a linear increase of Radiation Level in a Hex. It's more of a curve.

5.10.15.5. COMMANDER SKILL ROLLS

A number of Skill Rolls will be made by Commanders during combat. An OHQ or SHQ with a Vacant Commander post will never make any Skill Rolls.

Distance of HQ

SHQ Commander Rolls are limited to the High Command Skill Roll, but these rolls can be made from any distance.

Operational Commander Rolls are plenty, but their result is modified for the range of their HQ to their Unit (HQ Power %).

Combat Skill Rolls list

SKILL	HQ	EFFECT IF ATTACKER	EFFECT IF DEFENDER
Tank Tactics	OHQ	Attack Roll and Hit Point Roll Bonus	
Gun Tactics	OHQ	Attack Roll and Hit Point Roll Bonus	
Infantry Tactics	OHQ	Attack Roll and Hit Point Roll Bonus	
Offensive Tactics	OHQ	Attack Roll Bonus	
Defensive Tactics	OHQ		Hitpoint Roll Bonus
Operational Command	OHQ	Attack Roll and Hit Point Roll Bonus	
High Command	SHQ	Attack Roll and Hit Point Roll Bonus	
Deception	OHQ	Attack Roll Bonus based on Entrench	
Escape Artist	OHQ		Hitpoint Roll Bonus for Retreating Subunits
Demolitions	OHQ	Demolition Roll can deplete target's Entrench	

Attack Roll Bonus

Here the Commander makes a Skill Roll for each friendly Subunit attacking an enemy and if the Commander rolls higher than 100 points, it will give a 1% bonus to Attack Value for each point the Skill Roll was above 100 points.

Attack Roll Bonus based on Entrench

Only if it concerns the Defenders of a Hex, the Commander makes a Deception Skill Roll for each friendly Subunit attacking an enemy and if the Commander rolls higher than 100 points, it will give a 2% bonus modified by Entrenchment / 100 to the Attack Value for each point the Roll was above 100 points.

Hit Point Roll Bonus for Retreating Subunits

Here the OHQ Commander makes a Skill Roll for each friendly Subunit that is in the process of Retreating and that is under the attack of an enemy. If the Commander rolls higher than 100 points, it will quadruple the Hit Points of the Subunit.

Hit Point Roll Bonus

Here the OHQ Commander makes a Skill Roll for each friendly Subunit that is under attack of an enemy and if the Commander rolls higher than 100 points, it will give a 1% bonus to the Hit Point Value for each point the Roll was above 100 points.

Entrenchment Reduction

Here the OHQ Commander makes a Demolitions Skill Roll for Subunits that attack an enemy and if the Commander rolls higher than 100 points it will reduce the Entrenchment of its target with 0.5% bonus for each point the Roll was above 100 points.

5.11. LOGISTICS

Your Logistical Network connects your Zone Cities and your Units with your SHQs.

You need to be aware there are two separate logistical systems.

- The Logistical Network, which spreads out Logistical Points from your Logistical Sources (Truck Station, Rail Station) over your Road Network. To have a continuous Logistical Network, the Logistical Points reach of the different Sources need to overlap.
- The Operational Logistics of each individual Unit or HQ, which picks up its supplies from the nearest road Hex that is inside your Logistical Network.

5.11.1. BASICS

You need to have Assets that generate Truck or Rail Points. These are spread out within a certain Action Point (AP) Range from those Assets over your Roads or Rails as Logistical Points.

Having continuous Logistical Points on a road between your SHQ and a Zone allows Items to flow between them.



Above we see in green the continuous Logistical Points on the road between the SHQ to the left and the neighbouring Zone City to the right.

Having continuous Logistical Points on a road close to your Units/HQs allows supplies and replacement Troops to reach them.



Above we see the green shaded Hexes where Units will be able to pick-up full supplies from a nearby road Hex. Yellow, blue and red shaded Hexes will give Units problems in the long term. Black shaded Hexes means they will be able to pick up zero supplies because they are too far from a Road with Logistical Points.

5.11.1.1. LOGISTICAL NETWORKS AND LOGISTICAL POINTS

The Logistical Points originate from Cities where you can have Logistical Assets like Transport Hubs, Truck Stations or Train Stations.

These Logistical Points flow over your Roads (or Rails). Their range in Action Points (AP) is dependent on the Assets of their City of origin.



Here we see an example of a Logistical Asset. This Private Transport Hub provides you with 400 Logistical Points with a 50 AP Range (Truck Logistics Move Type) of its Hex.

Below we see the Logistical Points generated by the Private Transport Hub. We see that with the 50 AP Range, it has managed to put full Logistical Points on Hexes within range 4 but that after that,



the number of Logistical Points drops quickly until it fizzles out completely beyond 100 AP Range.

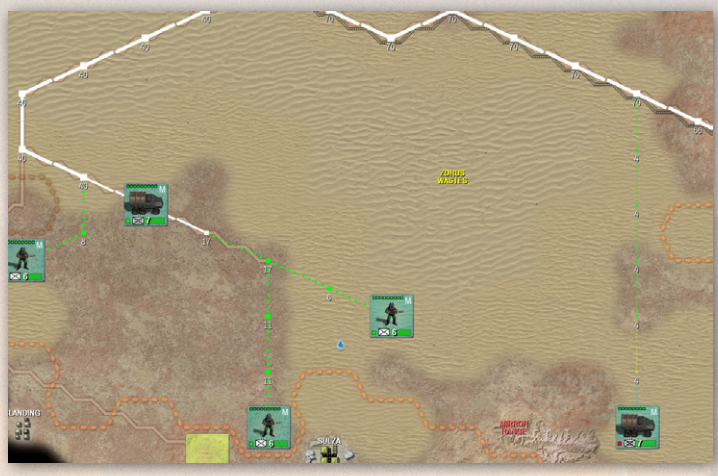
Your AP can be extended by Logistical Bases, but keep in mind their effect is not cumulative. For more info see further below.

5.11.1.2. OPERATIONAL LOGISTICS OF UNITS

A Unit can pick up full supplies and replacement Troops up to 50 AP distance range from its initial Hex. After that it will pick up partial supplies up to 100 AP distance range.

The exception is Food! Which is always delivered in full if you are within the 100 AP distance range.

The AP costs are calculated using the Operational Supply Move Type. In most cases this gives Unit a range of 4 Hexes to pick up full supplies. And a range of 8 Hexes to pick up insufficient but some supplies.



Above we are inspecting the map with the "Initial Logistics" layer active. We can see the Units to the left are in full supply while the truck Unit to the right is in bad supply due to being too many Hexes away from the nearest road with Logistical Points.

5.11.1.3. TRAFFIC SIGNS

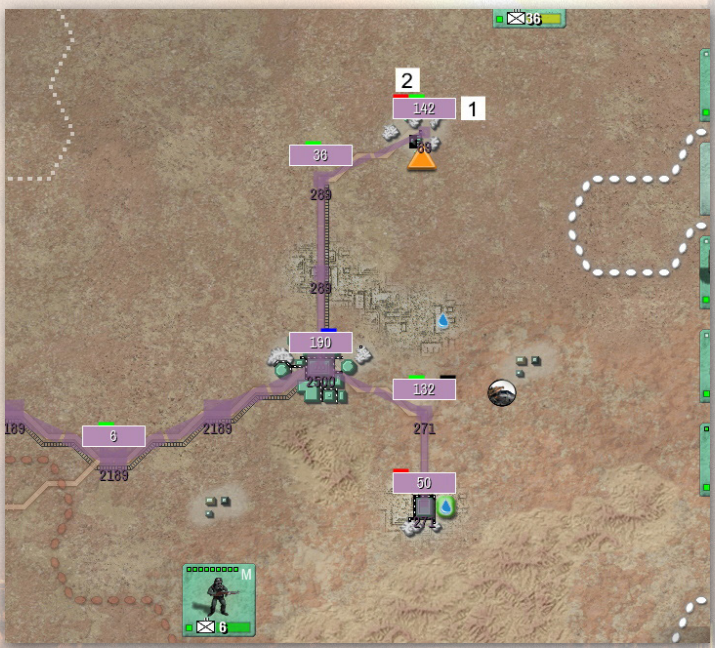
The flow of the Logistical Points over the Roads and Rails is an intricate algorithm that allows logistical flows to do separation and rejoining. However, the more Road and Rail branchings you'll have the more your Logistical Points will be dispersed. If you are using the default Automatic Pull Points system this will usually take care of things for you. However if you have disabled the flags for Automatic Pull Points (in the Traffic Signs Popup) you'll want to avoid the adverse effects of many branchings by setting Traffic Signs. Traffic Signs can (partially) block the dispersal of Logistical Points in certain directions allowing you to micro-manage your Logistical Network for optimal

use. Even when using the default Automatic Pull Points system you might in some cases want to put some Traffic Signs to reduce the Pull in a certain direction (for example in the case there are more Pull Points than you have Logistical Points and you want to prioritize something).

Enabling the Preview Logistics in the right sidebar and using it in tandem with the Traffics Signs Popup is a good way to explore the effects of different settings on your Logistical Network.

5.11.1.4. PULL POINTS

On default the Automatic Pull Points will be placed. These Points will correspond with the amount of Logistical Points a Hex will probably need for its Units, Assets or City to be able to receive and send Items. They will force the Logistical Assets to prioritize sending their Logistical Points towards these Hexes.



If you would disable the Automatic Pull Points the Logistical Points generated by Logistical Assets would evenly spread in all directions, with the Pull Points active the Logistical Points get guided through the maze of your Roads to arrive where they are actually needed.

By using the Traffic Signs Popup it is possible to add Custom Pull Points to a Hex or to block Automatic Pull Points for a specific Hex. In this Popup it is also possible to switch off completely the Automatic Pull Point placement.

Here we see the Preview Logistics Layer active. The numbers on the lines are the expected Logistical Points we'll have on the roads at the start of next turn. The numbers in the rectangles are the expected Pull Points on different Hexes.

1 When using the Preview Logistics Layer you'll be able to see the number of (Automatic) Pull Points that will be placed at start of turn.

2 The total number of Pull Points are displayed in the rectangle. The little coloured bars indicate the composing sources: Red for Asset Automatic Pull Points, Green for Unit Automatic Pull Points, Blue for City (Zone) Automatic Pull Points and Black for Custom Pull Points.

Note that when using the Used Points Logistics Layer you'll be shown the Pull Points that were present at the start of your current turn.

Also note that the Pull Points system is not perfect in all circumstances and that it works best when your SHQ is situated in the center of your Logistical Network (like your capital) on a City Hex with one of the higher levels of Logistical Assets you have. Avoid having your SHQ in a Hex without any Logistical Assets.

5.11.1.5. EXCESSIVE BRANCHING PENALTY

If your Logistical Points get split over multiple (Rail)roads that will count as a Branching. After 4 Branchings your Logistical Points will suffer increasingly stiff penalties when they get branched again.

5.11.1.6. REFOCUSING OF LOGISTICAL POINTS

Once your Logistical Points spreading out from a Logistical Asset reach another active Logistical Asset in a different Hex they'll be Refocused. Refocusing means that they'll start at their original full distance potential again but lose part of their Logistical Points equivalent to the percentage of its distance potential already used.

With the first Refocusing a further penalty of -25% onLogistical Points is applied. With the second Refocusing a penalty of -50% is applied and with the third Refocusing a penalty of -75% is applied. A fourth Refocusing is not possible.

5.11.1.7. WEIGHT OF CARGO

The weights of Cargo transferred by using the Logistical Network are the following:

TYPE	WEIGHT	CLARIFYING COMMENT
Infantry	5	They might be lighter in weight, but they take more space as they cannot really be stacked like herrings (or Metal ore) inside a truck or a train.
Trucks / Buggies / Tanks	10 or more	
Fuel	None	Pipes are assumed
Metals	1	
Rare Metals	1	
Radioactives	1	
Water	None	Pipes are assumed.
Food	1	
Industrial Points	None	It is an abstracted item.
Recruits	5	
Ammo	1	
Colonists	5	
Machines	1	
Hi-Tech Parts	1	
Energy	None	Cables are assumed.
Max Storage Points (different kinds)	None	These are abstracted items.

5.11.2. ROADS

It is important to keep in mind that the Logistical Network only extends itself over Rails or Roads.

These Roads have to connect one City or SHQ to another in order for them to be in the same Logistical Network.

The Roads do not have to go directly to OHQs and Units since they have Operational Logistics to pick up (or deliver) their supplies on a nearby Road Hex.

5.11.2.1. DIRT ROADS

The cheapest kind of Roads. They are also obligatory to construct if you are starting construction of a new Asset. 10 Truck Action Points per Hex.

Dirt Roads cost 20 IP to construct.

5.11.2.2. SEALED ROADS

These Roads are more expensive to construct, but more efficient and make your Logistical reach go further. 5 Truck Action Points per Hex. They thus double your Truck-based Logistical Networks reach compared to Dirt Roads.

Sealed Roads cost 50 IP to construct.

Constructing a Sealed Road over a Dirt Road gives you a -40% reduction on costs.

5.11.2.3. RAILROADS

These Rail lines are more expensive to construct, but much more efficient and make your Logistical reach go really far. 2 Rail Action Points per Hex. They thus more than double your Logistical Networks range compared to Sealed Roads.

Rail cost 30 IP + 30 Metal to construct.

Constructing a Railroad next to a Dirt/Sealed Road gives you a -50% reduction on costs.

5.11.2.4. SUPPLEMENTAL ROAD CONSTRUCTION COST

When constructing in difficult Landscape Types or over Rivers, Ridges or Canyons, expect a multiplier to be applied to the cost of your Road.

These costs are increased even more for Rail. It is very difficult to construct Rail in rough terrain as the railroad cannot follow a winding path or go up or down too steeply.

5.11.2.5. DEMOLISH INFRASTRUCTURE

The same way you can construct Roads you can remove Road/Rail from a Hex. This costs 5 IP per 10 AP.

5.11.3. LOGISTICAL ASSETS

There are several Assets you can build that help you with your Logistical Network.

Only one Truck Logistical Asset can be in a Hex. Only one (High Speed) Rail Logistical Asset can be in a Hex.

Conversion of regular Rail Stations II and higher to HS Rail Stations is possible. However doing this costs you an Asset level and will take 1 or more rounds of reconstruction activities. The Convert button can be found in the Assets Bottom Tab."

5.11.3.1. PRODUCTION DELAY

Turn X. Construction of Asset completed

Turn X+1. First Logistical Points produced by Asset

Turn X+2. Those first Logistical Points of X+1 are now applied at start of turn.

The rather technical design reason for the 1 turn delay between production and application is that those Logistical Assets need Items to be delivered to produce... but for those Items to arrive there need to be Logistical Points on the map... To avoid the classical chicken-and-the-egg problem I put a turn delay in.

5.11.3.2. TRUCK

	LOGISTICAL ASSETS	POINTS	OPTIMAL RANGE
Public	Truck Station	-	100AP
Public	Truck Station Level 2	2,400	105AP
Public	Truck Station Level 3	4,800	110AP
Public	Truck Station Level 4	8,800	115AP
Public	Truck Station Level 5	14,400	120AP
Public	Truck Station Level 6	21,600	125AP
Public	Truck Station Level 7	30,000	130AP
Private	Transport Hub	400	50AP
Private	Transport Hub Level 2	800	60AP
Private	Transport Hub Level 3	1,600	70AP
Public	Supply Base	-	+50AP Extension
Public	Supply Base Level 2	-	+75AP Extension
Public	Supply Base Level 3	-	+100AP Extension

5.11.3.3. RAIL

	LOGISTICAL ASSETS	POINTS	OPTIMAL RANGE
Public	Rail Station	2,000	100AP
Public	Rail Station Level 2	6,000	110AP
Public	Rail Station Level 3	11,000	120AP
Public	Rail Station Level 4	18,000	130AP
Public	Rail Station Level 5	27,000	140AP
Public	Rail Station Level 6	38,000	150AP
Public	Rail Station Level 7	51,000	160AP
Public	High Speed Rail Station	3,000	200AP
Public	High Speed Rail Station Level 2	10,000	210AP
Public	High Speed Rail Station Level 3	20,000	220AP
Public	High Speed Rail Station Level 4	34,000	230AP
Public	High Speed Rail Station Level 5	52,000	240AP
Public	High Speed Rail Station Level 6	74,000	250AP
Public	High Speed Rail Station Level 7	100,000	260AP

5.11.3.4. TRANSPORT HUBS & TRUCK STATIONS

These two Asset Types are Public and Private variants of the same thing: Trucks driving around picking up and dropping off Items, Supplies and Replacement Troops for your Units.

Both Assets generate Truck Points and range with Truck Action Points.

The Public version is more productive and efficient than the Private version and higher levels give you more range.

5.11.3.5. SUPPLY BASES

These bases give a boost to the Range of any Trucks that are passing them by. Logistical Extension produced in turn X is applied when the Logistical System is calculated in turn X+1.

This simulates the support they can offer in maintenance, crew shifts and planning.

Keep in mind that:

- The Range Boost is not cumulative with multiple Supply Bases en route (if you already have a Supply Base in place and at the end of the line you are not receiving enough Logistical Points, you should build another Truck Station somewhere in between).
- If Trucks passing it by are already beyond optimum range, they will not be restored to optimum range, but their range will be extended at their current %.

Let us show the example of a City with a Private Transport Hub and a Dirt Road. Let's compare its Logistical Points on that Dirt Road on different distances from the City. Comparing these values for with/without Supply Base.

DISTANCE	0	2	4	5	6	8	10	12	14	15	16
With Supply Base I	100%	100%	100%	100% (supply base here)	100%	100%	100%	60%	20%	0%	0%
With Supply Base II	100%	100%	100%	100% (supply base here)	100%	100%	100%	100%	100%	100%	80%
Without Supply Base	100%	100%	100%	100%	80%	60%	40%	20%	0%	0%	0%

5.11.3.6. TRUCK POINTS

These are cumulative and you can get Truck Points from a Private and a Public source at the same time.

5.11.3.7. TRUCK ACTION POINTS AND RANGE

These are non-cumulative and the highest Producing Asset is used to provide Truck Action Points.

These are basically range points and a City will have its full amount of Truck Points projected within this range.

After the range is exceeded the % of Truck Points projected slowly drops to 0 upon reaching Hexes at double the range or more.

5.11.3.8. RAIL/HIGH SPEED STATIONS AND RAIL POINTS

The Rail Points are cumulative and work the same as the Truck Points.

The Rail Action Points are used to project the Rail Points over your Logistical Network using Rail (use construct road to build Rail lines).

After the AP Range is exceeded the % of Rail Points projected slowly drops to 0 upon reaching Hexes at double the range or more.

5.11.3.9. RAIL POINTS ONLY STRONG BETWEEN STATIONS

The Rail Points are less flexible than your Truck Points and 90% of them will only be applied on Rail between two Stations (10% will still be applied to any rail line).

If you want to economize on your construction costs, you can also construct a Railhead Asset, which will function in the same way as a Station, except for the fact it does not add any Logistical Points as Stations do.

A Railhead is just a place where trains can turn around and receive some minor servicing.

Any Hex with Rail Points is a place where the train can stop and offload. Or in other words: you do not need a Station to offload your trains. You need two Stations (or one Station and one Railhead) for Rail Points to be applied on the Rail Hexes between them.

5.11.4. INVENTORIES

There are three type of inventory in the game.

5.11.4.1. ZONE INVENTORY

Production from Assets goes directly to this inventory.

Excess Items will be sent to the SHQ of the Zone. The Zone will take consumption costs for the next turn into account and will keep some Items in reserve.

Missing Items will be requested from the SHQ of the Zone.

5.11.4.2. UNIT INVENTORY

Each Unit has its own Item reserves (Ammo, Fuel, Food, etc..) and most turns they'll request fresh supplies from their SHQ.

5.11.4.3. SHQ INVENTORY

Each SHQ has its own inventory. It is used to send Items to Zones and Units that are requesting them. Furthermore, it will pick-up excess items from Zones. And last but not least it will send Replacement Troops to Units that are missing Troops (or pickup excess Troops).

5.11.5. DIFFERENT USES OF LOGISTICAL NETWORK

Your Logistical Network is used for many different things.

5.11.5.1. ZONE REQUIREMENTS

Zones might need Food to feed their Worker. Or they might need Metal to construct an Asset.

5.11.5.2. UNIT REQUIREMENTS

Units will need Food, Ammo and perhaps Fuel or Energy as well.

5.11.5.3. ZONE ASSETS NEED A LOGISTICAL NETWORK CONNECTION

Any Asset (public or private) needs to be connected to the Logistical Network. A Public Asset needs a 100 * Asset Level in Logistical Points connection and a Private Asset only half that (50 Logistical Points per level). These points needed are adjusted for any Limited Production Asset setting.

This is only needed for production and for Public Asset construction. Upkeep always works (as long as there is a land connection over friendly Hexes). Private Asset construction does not require Logistical Points and its production penalty is max 50%.

5.11.5.4. ZONE SUPPLY TO UNITS

It is possible to call the Governor of a Zone to tell him to supply Units if they are missing Items not delivered by their SHQ.

5.11.5.5. ZONE RETURNS

If a Zone is producing a surplus of Items, the Zone will try to return those to its SHQ.

5.11.5.6. REPLACEMENT TROOPS AND RETURNS

Units that suffered casualties will be looking to receive Replacement Troops.

Units that are changing their Formation might have Troops present that are no longer part of their "TOE" and should be returned to SHQ.

5.11.5.7. PICKUP POINTS

For SHQs that want to deliver Supplies or Replacement Troops to a Unit (or collect excess Troops), they can do so at a pickup point in the Logistical Network that is close to the Unit. The Unit can be off-road and provide the remainder of the transport with its Operational Logistics.

5.11.5.8. STRATEGIC TRANSFER

While executing your turn, you can use remaining Logistical Points in your Logistical Network to transfer your Units (or SHQs) strategically from one spot to another, provided there are sufficient Logistical Points on each Hex of the Trajectory to pay for the Transfer.

This costs the transported Units in Readiness and also depletes any remaining Unit AP completely. But if you have a large domain this is a really good way to get an army from one side of it to the other.

5.11.5.9. SHQ TRANSFERS

If you have multiple SHQs, you can transfer Items and Troops from one SHQ to another. You can also transfer Items from and to Zone Inventories. Logistical Points must be available between the source SHQs or the target SHQ or target Zone.

It is also possible to transfer from a SHQ to a specific Zone Inventory or the other way around. This kind of micro management can be necessary if you have given some of your Governors Zone Logistics Orders blocking all or specific Items from being send or requested.

5.11.5.10. RAISE FORMATION

If you Raise a Formation on a different Hex than the Hex of the SHQ, you are using, you'll need to pay the Logistical Points for the Items that will be needed to build the Troops that'll be present in the Formation.

If you don't build Troops, but use Troops already present in the SHQ, you'll need to pay the transport cost for them.

5.11.5.11. REPLACING & UPGRADING OF TROOPS

In case of replacing Equipment, you'll need to pay the Logistical Points cost for the transport of the Equipment to and from the Unit.

In case of upgrading, you'll need to pay the Logistical Point cost for sending the Items necessary to do an Upgrade in the field.

5.11.5.12. ZONE LOGISTICS ORDERS

When calling your Governor to discuss Zone Orders you will be able to tell him to block sending or requesting certain Items to or from the Zone's SHQ. This allows you some flexibility if your logistical network is under strain or you want to manually handle transfers (see SHQ Transfer Order 5.11.5.8). For inspection of current Zone Inventory Orders go to the Management Screen and the Asset Tab to quickly check the Items Table to the right for red cells, which signify a Zone Inventory Order being in effect on that Item.

5.11.5.13. MAXIMAL LOGISTICAL POINTS USAGE SETTING FOR SHQS

There are a number of uses of Logistical Points that are done automatically at the start of a new turn.

In order to give players some control over what they are allowed to be spenton, you can specify percentages for all automated SHQ activities that use Logistical Points.

SEQUENCE	SPECIFIC LOGISTICAL SUBSYSTEM	PLAYER CAN SET MAX % SPENT IN STANDING ORDER OF SHQ
-	*Logistical network creation*	
1	Zone requirements / supply	SHQ Standing Order Available
2	Unit requirements / supply	SHQ Standing Order Available
-	*Zone production*	
-	*Zone economy*	
3	Optional Zone Supply to Units	
4	Zone returns	SHQ Standing Order Available
5	Unit Replacement Troops and returns	
-	*Unit Item consumption*	

The Percentage specified in each Standing Order refers to a percentage of the original Logistical Points available on a Road upon creation of the Logistical Network that can be used.

The total of the percentages is allowed to surpass 100%.

Setting it lower is however a good way to guarantee you will have some Logistical Points left to, for example, execute Strategic Transfers during your turn.

Note that the limit allows using unspent points from earlier steps that did not reach the limit.

5.12. MODELS

Tank A is not simply a differently named Tank B. All Models are quite unique.

You can develop your own Models, which you can subsequently produce. In fact, to produce Regular Troops, you need to have discovered Model Types and designed Models.

You'll need a Model Design Council to discover Model Types and design your own Models.

Except for some Militia Troops, all types of equipment belong to a certain Model.

Think of a Model as a blueprint full of production instructions for how to produce a piece of equipment, gear or, for example, an armored fighting vehicle.

You can discover Model Types and design new Models for each discovered Model Type with your Model Design Council.

When designing a new Model, it is possible to make a brand new Design or to design an improvement to an already designed Model.

5.12.1. KEY CONCEPTS

You can discover Model Types and design Models using the Model Design Council. Once you have finished the design of a Model you can start producing it.

5.12.1.1. MODELS

A Model is a specific concrete implementation of a Model Type.

You'll start with some pre-designed Models. But normally you need to explicitly design a new Model once you have discovered a new Model Type.

Models can be designed from scratch or can be a newer version of a previously designed Model.

5.12.1.2. MODEL TYPES

Once you get a Design finished on a Model of a Model Type it will open up new discovery options that have that Model Type as a prerequisite. For example, after you have designed your first Light Tank, you can from that point forward discover the Medium Tank Model Type, but not the Heavy Tank Model Type. For that you'll need to design a first Model of the Medium Tank Model Type.

5.12.1.3. THE DESIGN CHOICES

When you order a new Design, you'll almost always will be asked to make some choices between different variants of equipment, armor, motors or weaponry.

5.12.1.4. MODEL STATS

A Model will get its Model Stats from your design choices, your technology and previous version Model Stats.

Some Model Stats cannot be improved with newer versions. This concerns structural design decisions taken early on.

5.12.1.5. OPERATIONAL STATS

The Model Stats are used as the basis to compute the Operational Stats of a Model.

The Operational Stats are what you'll see when you inspect a finished Model. "Soft Attack" and "Hitpoints" are examples of Operational Stats.

Keep in mind that the Operational Stats used in combat can be modified by a number of rules based on the Landscape Type, the type of opponent, etc… for more information on that go to the combat rules section.

5.12.1.6. MODEL QUALITY LEVEL

By going into the Management Screen and then to the Model Tab, you can set the Quality Levels for all Models you developed.

The Quality Level can be “Low”, “Average”, “High” to “Elite”. Or if you do not want to pronounce yourself it can be “None”. Furthermore, it can also be set to “Obsolete” indicating it should not be used any more by your Units.

The setting is used when sending Replacement Troops or returning Troops from Units to SHQs.

Setting the Quality Levels is optional. Feel more than free to leave the Quality Levels on “None”.

5.12.2. DISCOVERY OF MODEL TYPES

When you order your Model Design Council to discover new Model Types, it can only discover new Model Types that have pre-requisite Model Types that you already designed at least one Model for. See the Management Screen and the Model Type Tab.

So for example, to discover the Medium Tank, you need to have already designed a Light Tank Model.

5.12.3. DESIGNING A NEW MODEL

Depending on what kind of Model Type you are basing your new Design on, you'll normally have the opportunity to make at least some choices on its Design. This will be discussed further below.

5.12.3.1. MODEL TYPES

There are a large number of Model Types available to develop specific and custom-build Models for.

Infantry
Infantry is cheap and provides you with defensive strength. Especially if entrenched and in defensible terrain.

MG
Like infantry, but equipped with a machine gun, which is an excellent defensive weapon.

Bazooka
Like infantry, but equipped with a bazooka or RPG, which for its production cost is an excellent weapon against Armor.

Truck
A bare bones design that allows you to motorize your Infantry or Artillery forces. They provide plenty of mobility, but they require more Upkeep.

APC
Like a Truck, but equipped with Tracks instead of Wheels and with Armor. Furthermore, the APC has a MG mounted which gives it some punch. For cost calculations its size is level 3.

Anti-Tank Gun
If Bazookas are not cutting it any more against enemy armor, consider producing AT-Guns. These can use the newest tech in High Velocity Guns and pack as much punch as armor. They perform best in a defensive role.

Artillery
Allows you to engage in Ranged Fire from adjoining Hex of target. It guzzles ammunitions, but it allows you to do damage without engaging.

Light Tank
A small chassis design that can support up to 50mm of armor and up to a 60mm gun. For cost calculations, its size is level 4.

Medium Tank
A medium chassis design that can support up to 200mm of armor and up to a 105mm gun. For cost calculations, its size is level 6.

Assault Gun
Much like a Medium Tank but without a cupola, making it cheaper to produce (half IP cost), but less effective in an offensive role.

Heavy Tank
A large chassis design that can support up to 300mm of armor and up to an 180mm gun. For cost calculations, its size is level 8.

Monitor Tank
An extra-large chassis design that can support up to 400mm of armor and up to a 300mm gun. For cost calculations, its size is level 10.

Tank Destroyer
Much like a Heavy Tank, but without a cupola, making it cheaper to produce (half IP cost), but less effective in an offensive role. Furthermore, the design is really focussed on killing enemy armor and much less on killing softer targets.

Buggy
It's cheap, it's small, it can easily be given an overpowered motor and on top of that it has a MG. Furthermore, it has excellent Recon capabilities. Use Buggies as Scouts or for harassing enemy soft targets. Keep them away from enemy tanks.

Mechanized Artillery
Same as artillery but mounted on a medium chassis. It is mobile and can be equipped with armor, allowing these guns to live longer in hot combat zones or to survive enemy shelling.

Walker
The Walker is a hydraulics based biped that functions much like a tank but due to its locomotion can traverse hard terrains (much like infantry). Due to its Heavy Machine Guns, it is very effective against softer targets.

Heavy Walker
Much like regular Walker, but built with a larger chassis. It can support a gun of up to 180mm. Its main role is to destroy enemy Walkers and heavier equipment.

Rocket Launcher
Depending on the type of Rockets used, these Launchers can perform Ranged Fire up to 4 Hexes away.

Missile Launcher
Missiles are much like Rockets, only bigger. Missile Launchers can perform Ranged Fire up to 7 Hexes away.

Automated Turret
These are fully automated systems that function reasonably well. They allow you to save manpower and Upkeep costs. They are, however, fully immobile, so only strategic transfer can relocate them. These robotic systems are less intelligent than humans and will perform slightly less well.

Automated MG
These are fully automated systems that function reasonably well. They allow you to save manpower and Upkeep costs. They are, however, fully immobile, so only strategic transfer can relocate them. These robotic systems are less intelligent than humans and will perform slightly less well.

Quad MG

By combining 4 regular MGs into a Quad MG, a phenomenal amount of fire power can be brought to bear on advancing enemy Troops.

Mobile Shield Generator

Shield Generators extend an energy shield over all friendly Troops to protect them from enemy fire. This mobile version is the most useful as it can be used in an offensive role.

Wide-Area Shield Generator

Shield Generators extend an energy shield over all friendly Troops to protect them from enemy fire. This is an immobile installation that can only be moved by strategic transfer. It can be equipped with the strongest of Shield Generators.

Robotic Infantry

These are very much the same as regular Infantry, except that they are robotic. They thus do not require manpower to produce. They are, however, less intelligent than humans and will perform more poorly, especially when used in an offensive role.

Motorbike Infantry

This is the best price - quality Model Type to use for Reconnaissance. Except for its mobility and recon capability, it is much like regular Infantry when it is in combat.

Jetpack Infantry

Jetpacks allow the Infantry to make small jumps, giving them the mobility to be much more effective in offensive roles.

Atomic Launcher

Much like a regular Missile Launcher, except for the fact it is able to launch Atomic Missiles. Its base range is 4. It supports launching up to 10MT warheads.

ICBM

The Intercontinental Ballistic Missile Launch Platform is immobile but can launch its missiles Planet-wide. It can launch the biggest warheads you can research and, once you have them operational, will change the nature of warfare.

Mechanized Quad Gun

This is basically a Quad MG mounted on a small chassis. It allows for armor and speed and is an excellent complement to join in an attack of heavier armor, as it will be especially adept at neutralizing soft targets.

5.12.3.2. OVERVIEW OF CHOICES

Here follows an overview which Choices you can make when Designing a new Model of a certain Model Type.

MODEL TYPE	WEAPON	ARMOR	MOTOR
Infantry	Rifle	Personal Armor	
MG	MG	Personal Armor	
Bazooka	RPG	Personal Armor	
Truck	-	-	Motor
APC	MG	Armor	Motor
Anti-Tank Gun	High Velocity Gun	Personal Armor	
Artillery	Howitzer	Personal Armor	
Light Tank	Gun	Armor	Motor
Medium Tank	Gun	Armor	Motor
Heavy Tank	Gun	Armor	Motor
Assault Gun	Gun	Armor	Motor
Recon Buggy	MG	Armor	Motor
Tank Destroyer	Gun	Armor	Motor
Mechanized Art.	Howitzer	Armor	Motor
Walker	Twin Heavy MG	Armor	Motor
Heavy Walker	Gun	Armor	Motor
Rocket Launcher	Rocket	Armor	Motor
Missile Launcher	Missiles	Armor	Motor
Automated Turret	Gun	Armor	-
Automated MG	MG	Armor	-
Quad MG	Quad MG	Personal Armor	-
Mobile Shield Gen.	Shield	Motor	-
WA Shield Gen.	Shield	-	-
Monitor Tank	Gun	Armor	Motor
Robotic Infantry	Rifle	Personal Armor	-
Motorbike Infantry	Rifle.	Personal Armor	-
Jetpack Infantry	Rifle.	Personal Armor	-
ICBM Launcher	Missiles	Armor	Motor
Atomic Launcher	Missiles	Armor	Motor
Mech. Quad MG	Quad MG	Armor	Motor

So, for example, when you are designing a new Infantry Model, you'll be asked which type of Rifle and Personal Armor it should be (or not be) equipped with.

5.12.3.3. VARIANTS

When you are making the choices of which Variants of equipment a Model should use, you can inspect the strengths and weaknesses in the mouse-overs.

5.12.3.4. CALIBRE MODIFIER

Note that, in combat, low calibre guns used versus thick armor can receive up to a whopping -90% penalty, but never more. The calculation made is Weapon mm / Armor mm. So for example a 50mm gun used on 200mm armor will suffer a -75% penalty.

- Small Arms / Quad / MGs counts as 20mm
- Small Arms / Quad / MG Laser counts as 30mm
- Small Arms / Quad / MG Plasma counts as 50mm
- Heavy MGs (Walker) count as 40mm
- Heavy MGs (Walker) Laser counts as 60mm
- Heavy MGs (Walker) Plasma counts as 100mm
- Hollow Count as 100mm
- Hollow Heavy as 200mm
- Light Rocket as 100mm
- Medium Rocket as 200mm
- Heavy Rocket as 300mm
- Light Missile as 200mm
- Medium Missile as 400mm
- Heavy Missile as 800mm
- Plasma Missile as 1600mm
- Light Laser counts as 100mm
- Medium Laser counts as 200mm
- Heavy Laser counts as 300mm
- Very Heavy Laser counts as 400mm
- Beam counts as 300mm
- Combined Beam counts as 600mm

- Light Plasma counts as 200mm
- Medium Plasma counts as 400mm
- Heavy Laser Plasma as 600mm
- Very Heavy Laser Plasma counts as 800mm
- Atomics and Physical attacks are exempt from this calibre modifier.
- Ranged attacks see their mm divided by three due to the likelihood of a proximity instead of a direct hit.

Personal armors count in these calculations as follows:

- Envirosuit counts as 0mm
- Padded Armor counts as 20mm
- Combat Armor counts as 40mm
- Adv. Combat Armor counts as 60mm
- Battledress counts as 80mm
- Adv. Battledress counts as 100mm

5.12.3.5. WEAPON TYPES VERSUS ARMOR TYPES MATRIX

Some weapons perform better against certain types of armor or shielding.

Note that Plasma weapons are most efficient against high tech armor and shielding, but have a bad score against more low tech armors.

Note that Beam weapons provide a good mix and have good scores against all types of armor.

Note that Liquid armor is vulnerable against old fashioned kinetic bullets and shells, but is master in countering Laser weapons.

Note that Atomic weapons always perform normally.

ARMOR=>	NONE	METAL	POLYM	LIQUID	SHIELD
Bullets	Normal	Normal	Normal	150%	50%
Hollow	Normal	Normal	Normal	50%	33%
Laser	Normal	Normal	Normal	25%	50%
Beam	Normal	Normal	Normal	66%	75%
Plasma	Normal	50%	75%	Normal	Normal
Atomics	Normal	Normal	Normal	Normal	Normal
Physical	Normal	66%	33%	66%	Normal

5.12.3.6. MODEL STATS OF THE NEW MODEL

The Design choices of Variants and the Model Type determine the Model Stats. However, there is also a random chance that is involved.

Furthermore your Tech Level plays a major role as well.

Design Quality

The Structural Design Score is randomized with the first version of a Model and will not change with subsequent versions.

The Basic Design Score is initially randomized with the first version of a new Model, but can improve with subsequent versions.

The way to improve this Basic Design Score is through Field Testing. Or in other words, getting your Models produced and tested in real battle.

The Structural Design Score and Basic Design Score impacts the Engine Design, Weapon Design and Armor Design Stats. These are also randomized with the first version of a New Model, but they'll (probably) improve with each new version of of the Model (irrespective of Field Testing).

Tech Levels

There are several Binary Techs and quite a few Linear Techs that give bonuses to your Models Stats. If in Round X you designed Model A and in Round X+10 you researched a Tech, the effects of that Tech will no be applied to Model A. However, if you then design Model B in Round X+20, that Model will receive the bonus from that Tech.

5.12.3.7. OPERATIONAL STATS

The Design Stats are interesting for the designers in your Model Design Council, but what matters in the real world is the Model's Operational Stats. These are the ones that are used in actual combat.

Movement Cost Modifiers

The Engine Power (model stat) is ideally larger than the Weight (model stat) of the Model. If not we'll consider the Engine underpowered.

ENGINE POWER	MOVE COST MODIFIER
>= 270% WEIGHT	-20%
>= 210% WEIGHT	-15%
>= 160% WEIGHT	-10%
>= 120% WEIGHT	-5%
>= 90% WEIGHT	-
>= 80% WEIGHT	+10%
>= 70% WEIGHT	+20%
>= 60% WEIGHT	+30%
>= 50% WEIGHT	+40%
>= 40% WEIGHT	+50%
>= 30% WEIGHT	+60%
>= 20% WEIGHT	+70%
>= 0% WEIGHT	No move allowed

A further negative movement cost modifier is applied for very large vehicles and tanks. If Size Stat is 6 or 7, like Medium Tanks there will be an additional +10% move cost modifier. If Size Stat is 8 or 9, like Heavy Tanks there will be a +20% move cost modifier. If Size Stat 10 or higher, like Monitor Tanks, will give a +30% move cost modifier.

Attack Scores

The attack values like Soft Attack, Soft Defend, Hard Attack and Hard Defense depend mostly on the Weapon chosen for the Model.

The Firepower of the chosen weapon will become the Attack Value, modified for the following:

WEAPON TYPE	SOFT ATT	SOFT DEF	HARD ATT	HARD DEF
Conventional Small Arms	No mod	No mod	-50%	-50%
Hollow Charge	-66%	-66%	No mod	No mod
Energy Small Arms	No mod	No mod	-50%	-50%
Howitzer Gun	No mod	No mod	-50%	-50%
High Velocity Gun	-75%	-75%	No mod	No mod
Energy Gun	-50%	-50%	No mod	No mod

Foot is mostly defensive

Soldiers on foot without ranged attack have their Soft and Hard Attack Values divided by two.

MGs are even more defensive

On top of that division for being Foot, any MG also sees its Soft Attack, Hard Attacks and Hard Defence values divided by two. Note that its Soft Defence value is not divided.

Tanks are offensive weapons

Any vehicles (track/wheel) with Guns get their Hard Defence value diminished by one third.

Walkers are good against Tanks

Due to their high stature they are excellent tank killers. Hard Attack Value gets +50% and Hard Defence Value gets +25%.

Robot Brains are not that clever

Any autonomous Models will see their Attack values diminished with one third. Defence is easier to plan for them and here they suffer no penalties.

Jetpacks give better attack

Infantry with Jetpacks gets their Soft Attack doubled and Hard Attack increased with 50% due to the fact that they are tactically air mobile.

No turret, less offensive potential

Any Tank without a Turret (The Assault Gun) has its Hard Attack Value divided by two.

Hitpoints

The hitpoints will be set equal to the Armor Points (model stat).

Bulky Vehicles vulnerable to infantry

However, the bulkier the vehicle, the more it will be exposed to sneaky infantry attacks.

Structural Damage Points

Any Model with Anti-Structural Points will do damage to Assets in the Hex where it is battling. Small Arms do not do this, but Guns, Rockets and Missiles do 1 point of Structural Damage per 30 Fire Power (Model Stat).

5.12.3.8. MINIMUM TECH LEVELS

Some weapon technologies allow heavier variants of weapons or armour. Some of these have a minimum Regime Tech Level requirement to be installed in a new Model design.

- Medium Rockets and Missiles require Tech Level 3.
- Heavy Rockets and Heavy Missiles require Tech Level 5.
- 100mm armour requires Tech Level 2.
- 150mm armour requires Tech Level 3.
- 200mm armour requires Tech Level 4.
- 300mm armour requires Tech Level 5.
- 400mm armour requires Tech Level 6.
- Heavy Diesel requires Tech Level Engine 2.
- Double Diesel Engine requires Tech Level 3.
- Triple Diesel Engine requires Tech Level 4.
- Medium Electric Engine requires Tech Level 2.
- Heavy Electric Engine requires Tech Level 3.
- Double Electric Engine requires Tech Level 4.
- Triple Electric Engine requires Tech Level 6.
- Double Nuclear Engine requires Tech Level 5.
- Triple Nuclear Engine requires Tech Level 6.
- 60-88mm Guns requires Tech Level 2.
- 105-150mm Guns requires Tech Level 3.
- 180-240mm Guns requires Tech Level 4.
- 300mm Guns requires Tech Level 5.
- Medium Laser/Plasma Gun requires Tech Level 4.
- Heavy Laser/Plasma Gun requires Tech Level 5.
- Very Heavy Laser/Plasma Gun requires Tech Level 6.

5.12.4. FIELD TESTING

The "Basic Design" Model Stat has a big impact on the Model Stats of the next version of the Model.

This Basic Design Stat of a Model can go up with Field Testing.

You'll earn 1 Field Testing points for a Subunit of the Model placing a hit on an enemy.

You'll earn 5 Field Testing points for a Subunit of the Model being hit by an enemy.

Yes… you learn more from mistake than from success. At the end of a battle, the square root of these points will be added to the Base Design Stat for the Model in question.

These points are fully added if the difference between maximum and current Base Design Stat is large (40 points or more), but will have less chance to be added if the difference is less. Per battle, a maximum of 10 points are added to Base Design Stat.

Maximum Base Design Stat is 120 + (10 * version number of Model).

5.13. TECHS

You can obtain Techs by doing Research, by playing Stratagems and over time after making certain deals through Diplomacy Stratagems.

If you want to Research a specific Tech, you'll have to Discover it first.

5.13.1. KEY CONCEPTS

There are two different kinds of Techs: Binary ones and Linear ones.

Your Regime can acquire or advance in numerous Techs by Research or otherwise.

5.13.1.1. BINARY TECHS

Almost all Techs fall in this category. They become useful once you have fully researched them. They can be discovered and researched by your Military Research Council and your Economic Council.

Binary Tech costs the full amount of BP to obtain it.

5.13.1.2. LINEAR TECHS

Some Techs are Linear Techs. They become useful from the first point of progress you have made on them and provide a bonus to something. The higher your progress the higher the bonus. They can be discovered and researched by your Applied Science Council.

Linear Tech costs X BP per point, but the higher you get the more expensive it will get. At 25 points the cost will have almost doubled and at 50 points it will have quadrupled. At 75 points it will have increased sixteen-fold. 100 will be near impossible to reach.

5.13.1.3. DISCOVERY

For one of your Organizations to start Researching a Tech, you first need to Discover it. This can be done by allocating BP to an Organizations Discovery Task.

Any field that is open to discovery could be discovered next. Which one is beyond your control.

The Techs open to discovery are those in the Tech Groups you have access to.

5.13.1.4. RESEARCH

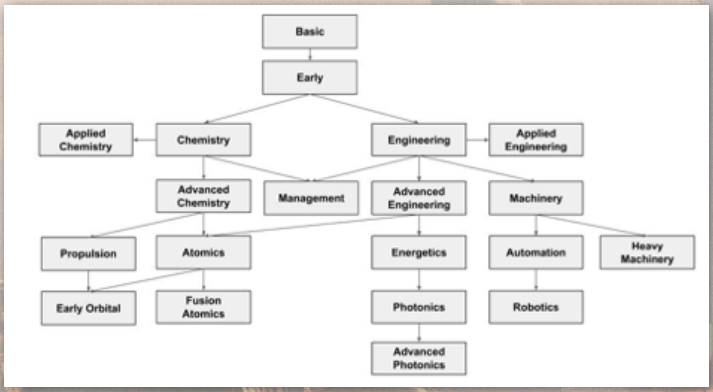
What is within your control is which Discovered Tech you want to be researched. The more BP you allocate to the Research Task of an Organization the more progress you will make on fully researching your chosen Tech.

5.13.1.5. TECH GROUPS

The Tech Fields are divided over a number of Tech Groups. Once you have fully researched 3 Techs in a Tech Group the Tech Group will be Mastered. Once a Tech Group is Mastered it will give you Discovery access to all Techs in its connecting Tech Groups.

Keep in mind that some Tech Groups require a minimum Regime Tech Level to become accessible.

5.13.2. TECH GROUP TREE



5.13.2.1. BASIC TECH GROUP

These fields are normally already researched when you start the game. They indicate a minimal level of technology that enables your Regime to move out and conquer.

Biofuel (#3)
This Tech allows you to construct Assets that can convert Food to Fuel.

Industry (#22)
This Tech allows you to construct Assets that can produce Industrial Points.

Recycling Facility (#2)
This Tech allows you to construct Assets that can extract Scavenge Points. These can also make Archaeological Finds!

Mining Facility (#3)
This Tech allows you to construct a number of different Mining Assets, including: Ice Mine, Metal Mine, Rare Metal Mine and Radioactives Mine.

Wind Traps (#20)
This Tech allows you to construct Assets that can trap moisture from the atmosphere and provide you with Water.

Truck Logistics (#94)
This Tech allows you to construct Assets that provide you with Truck Logistical Points and Range.

Farming (#18)
This Tech allows you to construct open Farms and domed Farms.

Envirosuits (#58)
This Tech allows you to design Models that wear Envirosuits.

Carbine (#9)
This Tech allows you to design infantry Models that use a simple automatic rifle as their weapon. Without it they'll be equipped with some version of bolt rifles.

5.13.2.2. EARLY TECH GROUP

This is the group of Techs that is most easy to acquire early without a huge tech base.

Solar Energy (#21)
This Tech allows you to build Assets that convert sunlight to Energy.

Physical Storage (#112)
This Tech allows you to build a number of Assets that can store specific Items. This allows you to avoid losing these Items if their stockpiles become too big.

Sealed Roads (#95)
This Tech allows you to construct Sealed Roads. Big improvement for long distance truck-based logistics.

Power Plant (#7)
This Tech allows you to construct Assets that produce Energy from burning Fuel.

Hospital (#30)
This Tech allows you to construct Hospital Assets. These provide QOL Health Points.

Barracks (#32)
This Tech allows you to construct Barracks Assets. These provide QOL Security Points and improve training of your Troops inside the Zone.

University (#8)
This Tech allows you to construct Universities. These provide QOL Education Points.

High Velocity Guns (#302)
This Tech allows you to design Models that use High Velocity Guns.

Padded Armor (#303)
This Tech allows you to design Models that wear Padded Envirosuit Armor.

High Velocity Small Arms (#43)
This Tech allows you to design infantry Models that use a fully Automatic Rifle as their weapon.

5.13.2.3. CHEMISTRY TECH GROUP

This is a group of Techs that focuses mostly on breakthroughs based on Chemical reactions, be they biological or non-biological.

Water Soil Recomposition (#114)
This Tech allows you to construct Assets that can extract Water from the lithosphere of the Planet.

Metal Soil Filtration (#115)
This Tech allows you to construct Assets that can extract Metals and Rare Metals from any part of the Planet's lithosphere.

Rocketry (#102)
One of the prerequisites for designing Rocket Launcher Models.

RPG (#304)
RPG is an acronym for Rocket Propelled Grenades. This Tech allows you to design RPG Infantry.

Guided RPG (#305)
An improvement on the regular RPG.

Hydroponics (#42)
This Tech allows you to build Assets that grow Food in vats. Requires less Water, but does require Energy.

5.13.2.4. ENGINEERING TECH GROUP

This Tech Group focuses on conceptualizing new machines or structures to create breakthroughs.

Side Skirts (#306)
This Tech allows you to design Tank Models that are equipped with Side Skirts.

High Speed MG (#307)
This Tech allows you to design Machinegun Models that are equipped with a high-speed MG.

Radiation Filters (#301)
These improve protection Suits and Vehicles provide from Radiation to their occupants. Once researched, they will be retrofitted and the effect will be immediate.

Vidcom Broadcasting (#100)
This Tech allows you to construct Vidcom Station Assets. These provide QOL Entertainment Points.

Heavy Industry (#4)
This Tech allows you to construct Assets that can produce Machinery Items.

Combat Armor (#308)
This Tech allows you to design Models that wear Combat Armor.

Gas Powered Small Arms (#44)
This Tech allows you to equip your Infantry and MG Models with Gas Powered rifles and MGs.

5.13.2.5. APPLIED CHEMISTRY TECH GROUP

This Group focuses on finding small and gradual improvements to known chemical reactions and material qualities. All Techs in this group are Linear.

Prospecting Optimization (#117)
This Tech helps the Prospecting Task to find new Raw Deposits.
Maximum times three.

Cross-Fertilization (#125)
This Tech increases the Food yield of Farms.
Maximum doubles.

Fuel Mix Optimization (#122)
This Tech increases the Fuel production.
Maximum doubles.

Armor Piercing Optimization (#53)
This Tech increases the effectiveness of your new Models against hard targets. Maximum 50% higher.

Vehicle Armor Optimization (#62)
This Tech increases the armor strength of your new Models. Maximum 50% higher.

Fuel Efficiency (#66)
This Tech decreases the fuel consumption of your new Models. Maximum 66% less consumption.

Payload Optimization (#107)
This Tech increases the explosive payload that can be carried by Rockets, Missiles and ICBMs.
Maximum 50% increase in lethality.

5.13.2.6. APPLIED ENGINEERING TECH GROUP

This Group focuses on making small and gradual changes to blue prints, construction methods and machinery. All Techs in this group are Linear.

Mining Techniques (#116)

This Tech increases the output of your Metal, Rare Metal and Radioactives mines.

Maximum doubled output.

Energy Storage Optimization (#123)

This Tech increases the amount of Energy that Power Bank Assets can store.

Maximum tripled storage.

Ice Mining Economization (#124)

This Tech increases the output of your Ice/Water mines.

Maximum doubled output.

Conventional Small Arms Optimization (#54)

This Tech increases the firepower of new Models using conventional Rifles and MGs. This include Gas-powered and Gauss Rifles.

Maximum 50% increase in lethality.

Energy Small Arms Optimization (#71)

This Tech increases the firepower of new Models using conventional Rifles and MGs. This include Laser, Beam and Plasma Rifles.

Maximum 50% increase in lethality.

Conventional Gun Optimization (#57)

This Tech increases the firepower of new Models using conventional Guns or Howitzers.

Maximum 50% increase in lethality.

Energy Gun Optimization (#74)

This Tech increases the firepower of new Models using Laser, Beam and Plasma Guns or Howitzers.

Maximum 50% increase in lethality.

Atomic Weapons Optimization (#72)

This Tech increases the firepower of new Models using Atomic Weapons.

Maximum 100% increase in lethality.

Shielding Optimization (#73)
This Tech increases the efficiency and protection an Energy Shield offers.

Maximum 100% increase in protection.

Personal Armor Optimization (#75)
This Tech increases the armor value of armored Suits (from padded Armor upwards).

Maximum 50% increase in protection.

Walker Optimization (#104)
This Tech increases the deadliness of Walkers.

Maximum 50% increase in effective fire power.

Launcher Optimization (#106)
This Tech increases the Range of Rocket Launchers, Missile Launchers and ICBMs.

Maximum 100% increase in range.

5.13.2.7. MANAGEMENT TECH GROUP

This Group focuses on making improvements in your organization, HR departments and doctrines.

Education Methods (#118)
Can improve QOL Education Point output by up to 100%.

Security Tactics (#119)
Can improve QOL Security Point output by up to 100%.

Sanitation Programmes (#120)
Can improve QOL Health Point output by up to 100%.

Communication Techniques (#121)
Can improve QOL Entertainment Point output by up to 100%.

5.13.2.8. ADVANCED CHEMISTRY TECH GROUP

This is a group of Techs that focuses mostly on breakthroughs based on Chemical reactions, be they biological or non-biological.

Synthetic Fuel (#6)
This Tech allows you to construct Assets that can convert Energy to Fuel.

Methane Synthesis (#110)
If your Planet has methane in the atmosphere, you can construct Assets that extract it and turn it into Fuel.

Water Atmospheric Recomposition (#113)
Certain Planets have atmosphere where it is possible to construct Assets that extract Water from chemical reactions between atmospheric gasses. This costs a lot of Energy however.

Serpentization (#109)
This Tech allows you to construct Assets that can use Water to trigger a Chemical reaction in the deep soil that generates Energy.

Missiles (#103)
This Tech allows you to design Missile Launchers.

Heavy Guided RPG (#309)
This Tech improves the Guided RPG weapon.

Polymer Armor (#310)
This Tech allows you to design vehicle and Tank Models that use Polymer instead of standard alloys for their Armor.

5.13.2.9. ADVANCED ENGINEERING TECH GROUP

This Tech Group focuses on conceptualizing new machines or structures to create breakthroughs.

Quad Gun (#311)
This Tech allows you to design Quad MG Models.

Heavy Combat Armor (#59)
This Tech allows you to design Models that wear Heavy Combat Armor.

Cluster Bombs (#312)
This Tech will increase the lethality of conventional Howitzers, Rockets and Missiles versus soft targets. New models will be fitted with the ability.

Advanced Sensors (#313)
New Models will be equipped with superior Sensors that will double the Recon Points of the Model.

Gauss Rifles (#212)
This Tech allows you to design models that use Gauss Weapons as their Rifle or MG.

5.13.2.10. MACHINERY TECH GROUP

This Tech Group focuses on conceptualizing and designing new machines.

Volcanic Energy Tap (#108)
This Tech allows you to construct Assets that can tap Volcano Hexes for Energy.

Power Banks (#24)
This Tech allows you to construct Assets that increase your Zones' Energy storage capacity.

Deep Core Mining (#111)
This Tech allows you to construct Assets that extract Fuel from the deep Magma layers deep inside the Planet. Planet must be geologically active in order for this to work.

Water Purification (#47)
This Tech allows you to construct an Asset that can produce extra Water for you if placed next to a Sea or River Hex.

5.13.2.11. PROPULSION TECH GROUP

This Tech Group focuses on creating new methods of locomotion and propulsion.

Electric Engine (#314)
This Tech allows you to design Models that use an Electrical instead of a combustion engine. These engines however use Energy instead of Fuel.

Jetpack (#315)
This Tech allows you to design Jetpack Infantry Models.

High Speed Rail (#316)
This Tech allows you to construct Magnetic Rail Lines and High-Speed Rail Stations.

Micro Nuke RPG (#317)
This Tech provides you with the option to equip your RPG Infantry Models with an extremely lethal weapon.

Nuclear Plant (#318)
This Tech allows you to construct Assets that produce a lot of Energy by fissioning Radioactives Items.

Radiation Cleansing Facility (#319)
This Tech allows you to construct Assets that clean up Radiation waste.

The higher the Level of the Facility, the further away it will be able to clean-up Radiation.

Atomic Bomb (#320)
This Tech allows you to design Nuclear Missile Launchers.

Tactical Nuke (#321)
This Tech allows you to design guns that can launch small nukes. The tactical nuke can only be installed on the Monitor Tank and the Automated Turret.

5.13.2.12. ENERGETICS TECH GROUP

This Tech Group focuses on harnessing and creating new forms of magnetism, energy and light.

Laser Rifles (#322)
This Tech allows you to design models that use Gauss Weapons as their Rifle or MG.

Laser Guns (#323)
This Tech allows you to design Tank models that use a Laser Gun.

Hi-Tech Industry (#324)
This Tech allows you to construct Assets that can produce Hi-Tech Items.

5.13.2.13. AUTOMATION TECH GROUP

This Tech Group focuses on robotization and software-controled machinery.

Battledress (#60)
This Tech allows you to equip your new Infantry Models with a powered armor.

Industrial Robotization (#325)
This Tech allows your Regular and Heavy Industries to produce double what they produced before. Hi-Tech Industry does NOT benefit from this Tech.

Automated Turret (#326)
This Tech allows you to produce Automated Turrets.

Hydroponics Robotization (#327)
This Tech allows all your Hydroponic Assets to produce more.

Adds 100% extra production.

If you have this Tech and Food Mass Pool, together they'll add 300% extra production.

Mining Robotization (#328)
This Tech allows all your Mines to produce more.

Doubles the production (this excludes Oil Drilling).

5.13.2.14. HEAVY MACHINERY TECH GROUP

This Tech Group focuses on conceptualizing and designing exceptionally heavy or big new machines.

Walker Hydraulics (#101)
Allows you to design Walker Models.

Extreme Vehicles (#329)
Allows you to design Monitor Tanks.

Food Mass Pool (#330)
This Tech allows your Hydroponic Assets to produce much more.

Adds 100% extra production.

If you have this Tech and Hydroponics Robotization, together they'll add 300% extra production.

5.13.2.15. EARLY ORBITAL TECH GROUP

This Tech Group focuses on escaping fully or partial the atmosphere of the Planet. In this pursuit many related fields might be touched upon.

ICBM Fusion 10MT (#331)
This Tech allows you design ICBM Models.

Nuclear Engine (#332)
This Tech allows you to equip new vehicle Models with a Nuclear Engine. These engines work on Atomic batteries and thus no Fuel or Energy is required.

ICBM Fusion 50MT (#333)
This Tech allows you to increase the power of the missiles launched by your ICBMs.

ICBM Fusion 100MT (#334)
This Tech allows you to increase the power of the missiles launched by your ICBMs.

5.13.2.16. FUSION ATOMICS TECH GROUP

This Tech Group focuses on more advanced forms of extracting energy or lethal weapons from Radioactives.

Fusion Plant (#336)
This Tech doubles the output of your existing Atomic Plants.

Fusion Bomb (#335)
This Tech allows you to equip your Nuclear Missile Launchers with a more lethal Radioactive load.

5.13.2.17. PHOTONICS TECH GROUP

This Tech Group focuses on more advanced forms of harnessing energy, lasers and related technologies.

Charged Gauss Rifle (#46)
Improved version of the regular Gauss Rifle.

Beam Guns (#337)
This Tech allows you to equip your vehicle models with Beam Guns.

Shield Generator (#338)
This Tech allows you to design Mobile and Wide Area Shield Generator Models.

Atmospheric Membranes (#339)
Open Farming becomes possible irrespective of Atmospheric hazards. However, keep in mind that extreme temperatures and/or alien biohazards might still make open farming impractical.

5.13.2.18. ROBOTICS TECH GROUP

This Tech Group focuses on completely on advanced robotization.

Heavy Battledress (#340)
This Tech allows you to equip your Infantry Models with a super advanced version of regular Battledress.

Robotic Soldier (#342)
This Tech allows you to design Robotic Infantry Models that can act as replacements for regular Infantry.

Liquid Armor (#343)
Intelligent armor using high pressurized liquids to counter the effects of Energy weapons. Allows you to equip your vehicle Models with this armor, instead of conventional or polymer alloys that are both vulnerable to Energy weapons.

5.13.2.19. ADVANCED PHOTONICS TECH GROUP

This Tech Group focuses on completely on advanced robotization.

Miniature Shield Generator (#344)
This Tech allows you to equip your Infantry Models with their own personal energy shields.

Plasma Guns (#345)
This Tech allows you to equip your vehicle models with Plasma Guns.

Combined Beam Guns (#346)
This Tech allows you to equip your vehicle models with Combined Beam Guns.

Light Plasma Rifles (#343)
This Tech allows you to equip your Infantry Models with portable plasma weaponry.

5.14. RECON

You can acquire Recon on three kinds of game pieces. On Regimes, on Zones and on Units.

The means to acquire this Recon is by Spies, by Unit Recon and by diplomatic contact or proximity.

5.14.2.1. REGIME RECON

On each Regime you can have a number of Recon Points.

The more Recon Points, the more you know about the Regime.

Regime Recon Levels
The higher the Recon Level, the more you know about another Regime.

The Recon Level is determined at the start of the turn. If you find a new Regime on the map during your turn you'll have to wait till the next turn to be able to play Stratagems (like Make Contact) on it.

LEVEL	INFORMATION
0	You just encountered this Regime and have yet to learn more. You cannot play Stratagems on it You can always see if a Minor is a Vassal or Protectorate of a Major Regime
1	You know the Regime exists and you can play Stratagems on it
2	You know the Leader and Culture of the Regime.
3	You know their Tech Level
3	You know their Political System
4	You know their Factions / Their Leader Faction
5	You know the Profile of the Regime
5	You know their Regime Feats
5	You know who they are at war with and peace with
6	You know the Details on their Factions (support received from 3rd parties + profiles)
10	You have indication of the ai Intention. At 50 you are sure
10	You know their Tech Levels
10	You know an approximate of Total Economy Stats. At 50 you are sure. Includes Trade (might need stats)
10	You know the boundaries of the Zones the Regime controls
10	You know an approximate of Total Military Stats. At 50 you are sure.
50	Statistics Tab active. You know their total force strength and losses and kills (Statistics)

The Recon Level is determined at start of turn and takes the following into account:

- Having Hex-to-Hex contact with a Regime at start of turn ensures Recon Level growth up to Level 2 (in the case of Minors with Unclear relation you need to have Hex-to-Location or Hex-to-Unit contact)
- Having had a diplomatic or other interaction with a Regime before the start of the turn can raise the Recon Level with up to 10 points
- Your total number of Spies in all their Zones * 2 as extra Regime Recon Points
- 20 Recon Points for having Opened Contact, 40 Recon Points for having an Embassy, 60 Recon Points for having a Cultural Exchange in place
- 10 Recon Points for Trade Relations, 20 Recon Points for Free Trade relations, 30 Recon Points for Free Movement relations
- 5 Recon Points for Scientific Cooperation, 10 Recon Points for Scientific Exchange and 15 Recon Points for Scientific Joint Effort

- 5 Recon Points for Non-Aggression pact, 10 Recon Points for Friendship pact, 15 Recon Points for Victory pact
- 20 Recon Points if you are the Protector of a Minor Regime
- 40 Recon Points if you are the Master of a "Client State" Minor Regime
- Being a shareholder in a MTH together with another Major Regime gives +1 recon on that Regime. If you have more shares than that Regime it is +5 due to the MTH sharing more info with you.

5.14.2.2. ZONE RECON

On each Zone you can have a number of Recon Points.

The more Recon Points, the more information you know about the Zone and its Hexes on the map.

Zone Recon Levels

The higher the Zone Recon Level, the more you know about the Zone.

The Zone Recon Level is determined at the start of the turn. If you find a new Zone on the map during your turn, you'll have to wait till the next turn to be able to play Stratagems (like Spies) on it.

LEVEL	INFORMATION
0	You just encountered this Zones and have yet to learn more. You cannot play Stratagems on it.
1	You know the Zone exists and you can play Stratagems on it.
2	You know the Zone extent, Governor and Owner
5	Know all Hexes + Get Recon Level 1 on neighbouring Zones
10	Have 1 Hex Recon Point on all Hexes of Zone
15	Know all Key Zone Statistics
11-30	Have 10 Hex Recon Points on some Hexes of Zone. At 30+ all Hexes will have 10 Recon Points
20-100	Have 100 Hex Recon Points on some Hexes of Zone, at 100+ all Hexes will have 100 Recon Point

The Zone Recon Level is determined at start of turn and takes the following into account:

- Having Hex-to-Hex contact with a Zone at start of turn ensures Zone Recon Level 1
- 1 Zone Recon Point for each 10 Regime Recon Points you have on its owner
- 1d4 Zone Recon Point for each Spy you have in the Zone

- Having Recon Level 5 or higher on a neighbouring Zone
- Protectorate Zone is +10
- Client Zone is +20

5.14.2.3. LOSING SPIES

You can lose Spies due to various reasons. Think of those disappearing as getting killed in action or returning to base to avoid exposure.

The better the Covert Ops Skill of the Director of your Secret Service Council, the less chance there is this happens.

The higher the Troops density, security level, Governor Secret Ops Skill, Tradition level of the Zone of the Spy's operations, the greater the chance of losing the Spy.

Spies will be more prone to capture if they are more numerous.

5.14.2.4. HEX RECON LEVELS

This is more like tactical Recon and reveals information on Units or Assets in the Hex.

LEVEL	INFORMATION
1	You can spot Units in the Hex as well as any Assets
40	You can spot details on the Units in the Hex (but it will be fuzzy)
400	You will know 100% sure the details of the Units in the Hex

5.15. VICTORY

Winning the game is in theory a straightforward affair. Check the Victory Report in the Reports Tab for a breakdown how far away you are from victory.

In a nutshell, you need to have a Victory Score higher than 50 while the difference with your closest opponent is at least 25 points.

The Victory Score is a mix of the percentage of Planetary Populace and the percentage of the Planetary land Hexes you control.

5.15.1. PBEM / HOTSEAT

A game started with multiple Humans has the same victory condition as a single player game. However, in a "PBEM" game eliminating all other Human opponents is also considered a victory.

5.15.2. RESIGN

It is possible to resign as well. To do this call your Secretary and discuss your resignation with him/her. In a multi-player game this is essential to keep the game running for possible other players. In a single player game with FOW this is a more interesting option because more statistics will be visible to you before you abandon your empire for good.

Note that it takes one turn for your resignation to be turned into a defeat. So, after resigning you'll always have to press the End Turn button.

5.16. ON THE SCALE

This section includes a few notes on the scale of the game.

5.16.1. PLANET

One Hex is 200km in size.

5.16.2. TIME

One turn is 2 earth months (but not necessarily 2 local Planet months… that depends on the length of a local year). Do mouse over the date in the Map Screen to see all the dates.

5.16.3. RESOURCES

To give you an idea here is a list what each Item more or less represents:

RESOURCE	REPRESENTS
1 Fuel	10 Tons
1 Metal	10 Tons
1 Rare Metal	10 Tons
1 Radioactives	10 Tons
1 Water	100 Tons
1 Food	10 Tons
1 Industrial Points	Abstracted
1 Ammo	5,000 cartridges / 100 shells
1 Machines	Abstracted
1 Hi-Tech Parts	Abstracted
1 Energy	100 MWh
1 Credit	Say about $25,000 equiv.

5.16.4. LOGISTICS

1 Logistical Point equals 10 Tons of transport potential.

5.16.5. OTHER THINGS

Rainfall is kept track of in mm/year. Where a year is an old-Earth year. So if in a certain round you inspect a certain Hex and would want to know the real rainfall in mm for that round (2 old-Earth Months) you would have to divide it by 6.

5.17. DESIGN COMPROMISES

Especially on scale, some compromises have been made. Combat and logistics are modelled as if the game Hex scale was lower. Combat with a few thousand men (or even several tens of thousands) would not see frontlines as we see them in the game. Some abstraction has been taking place between what probably would have happened and what is happening in the game.

Concerning logistics things should have been harder on the player, given the really huge distances (200km/Hex) on the map.

Concerning the economy, things are modelled as if the Populaces were bigger than they actually are. One might raise an eyebrow at sometimes very small groups of people managing to build railroads, nuclear plants and huge factories.

On logistics and economy and in my defence: Countries like Iceland have undertaken many large projects as well and they could well have been a Zone in *Shadow Empire*. Furthermore, we are playing in the far future and some of technical details of equipment, Assets and Techs being used might well be superior to our own analogues.

Research has been modelled as if the game's turn scale was actually higher. It would be doubtful our survivors in *Shadow Empire* could in reality actually advance from bullet-spitting rifles to plasma weapons in less than the span of a lifetime. However, in my defence: a Slow option is proposed in the game setup and much left-over knowledge can still be found on the Planet. It would be good to look at research as partially research and partially learning to re-understand old documentation and machinery.

I also had to compromise on the AI design. What I tried to do is make the AI play by different rules whereever where making the AI able to play by the same rules would require excessive coding time with minimal gain for the player experience. What has always remained important to me is that the core rules that actually decide defeat or victory (combat and economy), the AI plays by exactly the same rules. For example: If you take its Farms, the AI will have a problem feeding its Troops. If the AI does not have a Water Mine, it will have to build bloody expensive Wind Traps to get Water to its Farms. If you encircle the AI its Troops will starve. Etc...

No simulation is perfect. And in game design, some compromises always have to be made. I know some people will claim differently, but I beg to disagree with them.

Some compromises have been made to make the gameplay work better, some to save some valuable design time. Keep in mind that I spent a long time on the development of *Shadow Empire* and that development is very probably (as I see it at the time of writing) not finished yet and in the coming years many additions and improvements to the game are still possible.

You might agree with the above. Or not agree, but I wanted to let you know we are aware that it is possible to criticize a number of the design choices that have been made.

5.18. AI RULES DIFFERENCES

The AI partially plays with the same set of rules as the Human players. Notably the AI uses the same rules for almost all the economic and military parts of the game. However, in quite a number of cases a different set is used for the AI.

RULES MODULE	MAJOR REGIME AI	MINOR REGIME	UNALIGNED
Combat	▪ Same rules ▪ AI Zone Danger however does not increase due to combat	▪ Same rules ▪ AI Zone Danger however does not increase due to combat	▪ Same rules
Production and construction	▪ Same rules	▪ Private Assets only	▪ None
Supply, Ammo and Fuel usage	▪ Same rules	▪ Militia-like forces only	▪ Militia-like forces only
Logistical Network	▪ Free Dirt Road construction ▪ Free Logistical Points and AP Range on its Cities	▪ Units get supplied as Militia, but supplies do not pass through an SHQ, but Units do need a connection with their City	▪ Supplies arrive directly with Units, even if encircled (also the case for certain Minors that don't normally have Cities)
Organizations, Techs, Models and Formation Types	▪ No Organizations ▪ Does need to produce BP ▪ BP is directly spent on buying Techs, Models or Formation Types	▪ No Organizations ▪ No Techs, Models or Formation Types ▪ Their Troops and equipments improves over time	▪ No Organizations ▪ No Techs, Models or Formation Types ▪ Their Troops and equipments improves over time
Factions and elections	▪ Almost same rules as for a Player Major Regime ▪ But the Leader of the Faction that wins the election becomes the new Supreme Leader ▪ Fixed to 3 Factions with their own scripts ▪ No new Factions ▪ No Faction deletion	▪ *No Factions, no Elections	▪ *No Factions, no Elections
Spies	▪ Doesn't use them yet except for in some story events ▪ But AI has a rather vague view on your empire	▪ Doesn't use them yet except for in some story events ▪ But AI has a rather vague view on your empire	▪ Units only see direct neighbouring Hexes
Decisions and story modules	▪ Will not be confronted with them	▪ Will not be confronted with them	▪ Will not be confronted with them
Leader Relation levels	▪ Separate calculation method ▪ Governor not impacted (positively or negatively) ▪ Skill Rolls not impacted (positively or negatively)	▪ Only a Supreme Leader	▪ No Leaders
Regime Profiles and Unit Feats	▪ Uses same rules for Profiles and related Unit Feats ▪ *Also gets the Veteran Sergeant, Lieutenant and Captain Unit Feats with time.	▪ No profiles	▪ No profiles

Treasury, Credits, Trade	▪ Easier rules and no Credits need to be paid for salaries or recruitment ▪ Trade rules are exactly the same as for non-AI Players	▪ None	▪ None
Colonists, Workers, Population, Recruits	▪ Can shift Populace more easily between them ▪ Recruits follow the same rules	▪ None	▪ None
Stratagems	▪ Only has access to Diplomacy and Posture (if profile is right) Stratagems	▪ No Stratagems	▪ No Stratagems
Playing of Diplomatic Stratagems	▪ If target is an AI the response is immediate. If target is Human Player the response will follow in the humans turn.	▪ If target is an AI the response is immediate. If target is Human Player the response will follow in the humans turn.	▪ Cannot be a target
Diplomatic Relations	▪ Some scripted diplomatic events, but the AI makes its own analysis and determines which diplomatic Stratagems to playable ▪ Relations with Minors for the AI are always "clear".	▪ Scripted Diplomatic Events	▪ Always at "war" with everybody

The AI thus has a number of advantages over a Human player, such as that it is easy for the AI to maintain a good Logistical Network with lots of Points, but keep in mind that this does not protect the AI from encirclement.

Furthermore the AI also has a number of disadvantages as it is not able to pick up on a number of extras that players can (from Stratagems, Decisions and stories) as well as missing out on some bonuses (like high Leader Relation scores).

6. ADDITIONAL RULES

6.1. AIR FORCES

Air forces are the first big post-release addition to the rules of *Shadow Empire*.

As they might not be everybody's cup of tea, when setting up a new game you can explicitly choose to have these Air forces rules enabled or disabled. You do this by flagging the option "Air Forces enabled" under the Development and Technology Level settings in the Generation Settings Window during setup.

6.1.1. INTRODUCTION

Air forces allow you to use many new tactics and strategies. From reconnaissance missions, to ground support airstrikes to organizing Air Bridges.

However Air Model Types are a type of equipment that requires careful Model design depending on the type of Planet where you find yourself. A Planet with hardly any atmosphere will not be able to support Propellor Engines or Jet Engines, as there is nothing for them to use to create velocity, but Rocket Engines might well enable you to take to the skies. Planets with both low gravity and a reasonable atmosphere will make it extremely easy to fly and Airpower will likely be important on these kinds of worlds. In the right circumstances (air pressure > gravity) Thopters will also be a viable option.

Air Model Types are special in the fact that they can be very lethal, but are very vulnerable at the same time. They do not have a lot of Hitpoints and are thus vulnerable to Anti-Air weaponry and enemy Interceptors.

It does require a certain level of investment however to develop your own Air Force. Research needs to be done and Model Types have to be discovered and then designed. And you'll need the infrastructure in the form of Airbases to properly service your Air Units.

6.1.2. MOVING AIR UNITS

You'll need to be in Move Order Mode in order to do this. Once there this is done in exactly the same way as you move your Land Units. You left click

to select a Unit and then right click on a highlighted (in white) Hex the Unit has to move to.

However keep in mind that Aircraft (except VTOL) will need a Hex with a sufficient Airbase Level in their destination Hex. Inspect your Air Models' details to learn the minimum Airbase Level necessary.

AIRCRAFT MODEL TYPE	MINIMUM AIRBASE LEVEL NEEDED
Ultralight Aircraft	Level 1
Light Aircraft	Level 2
Medium Aircraft	Level 3
Heavy Aircraft	Level 4
Extra-Heavy Aircraft	Level 5
Helicopters	none*
Thopters	none*
VTOL Aircraft	none*

*=Not needed, but still advised to have your Helicopters, Thopters and VTOL aircraft at optimal Readiness.

6.1.3. AIRSTRIKES

To launch Airstrikes you need to switch the Order Mode to Airstrike. An Airstrike is initiated much in the same way as a regular Land Attack. You left click to select an Air Unit and then you right click on a highlighted (in red) Hex to initiate an Airstrike on that Hex. Doing so will bring up the Combat Selection Popup and allow you to add even more Air Units to the Airstrike, from different source Hexes if you wish to do so.

6.1.4. AIR RECON

To do an Air Recon mission you need to switch the Order Mode to Air Recon. Once this is done you left click to select an Air Unit and then right click on a highlighted (in white) Hex the Unit has to perform an Air Recon mission on. Doing so will bring up the Combat Selection Popup and allow you to add even more Air Units to join the Air Recon mission.

Keep in mind that Air Recon missions last only 3 combat rounds (and the first 2 are less lethal where it concerns air-to-air fire). More about this in the Air Combat section.

An Air Recon mission will give you Recon Points on the Hex in question, but also on neighboring Hexes. It gives you much more recon than any

coincidental recon gained with other missions. The Recon Points gained in this way are of course only valid for the remainder of your turn.

6.1.5. AIR BRIDGES

When in Air Bridge Order Mode you are not immediately executing Air Bridges, instead you are setting the order to do so at the start of your next turn.

To order an Air Bridge mission you need to switch the Order Mode to Air Bridge. Once there this is done you left click to select an Air Unit and then right click on a highlighted (in white) Hex the Unit has to perform an Air Bridge mission on. Doing so will establish the Air Bridge order.

You'll be notified by the appearance of a letter on the Unit and the Hex. Note that this letter has a background color to indicate its status.

COLOR	STATUS
Gray	Just ordered, will be executed early next turn
Black	Executed without issue start of this turn
Red	Executed with damage suffered start of this turn
Blue	Executed with less logistical points than expected at start of this turn.
Orange	Executed with less logistical points than expected at start of this turn. And also suffered damage.

You can cancel the order by going to the specific Air Bridge Detail Popup (accessible through Air Bridge Report in your Reports Tab or through Zone Logistical Bottom Subtab) or by re-issuing the Air Bridge Order on the same Hex (which will be interpreted as a cancelling of the order)

However keep in mind that Aircraft (except VTOL) will need a Hex with a sufficient Airbase Level in their Air Bridge destination Hex. Inspect your Air Models' details to learn the minimum Airbase Level necessary.

As Air Bridges are only executed at the start of your next turn make sure you'll leave enough Action Points (and maximized to Readiness) with your Units. Otherwise they might not be able to execute the Air Bridge Order. When the Air Bridges are executed it is possible enemy Air Units intercept your mission, or enemy Anti-Air Units fire upon your Air Bridge attempt. This can cost you Air forces as well as impose a Damage Percentage on the Air Bridge.

Keep in mind that Air Bridge missions last only 3 combat rounds (and the first 2 are less lethal where it concerns air-to-air fire)

If two Air Bridges are present between Hex A and Hex B, one from A -> B and one from B -> A any Logistical Point usage is spread over the two, same for determining damage. Both are weighted for their size when applying these rules.

Having a Damage Percentage on an Air Bridge means that any Troops or Items flowing through it will probably lose that percentage. For automated flows it is possible to set a maximum Damage Percentage in the SHQ Unit Administration Popup. If you set this to maximum 20% Damage, for example, your SHQ will not try to use an Air Bridge with 30% Damage to supply a Unit.

Some Items have no weight (Water/Energy) for regular land transport, but for Air all items have at least a weight of 1.

If a logistical connection by Land is possible the Air Bridge will not be used.

Air Bridges can be used for:

- Supply to Unit (SHQ can disable)
- Supply to Zone (SHQ can disable)
- Pickup from Zone (but not Maximum Storage) (SHQ can disable)
- Strategic Move Mode (either as Air Landing or Air Evacuate)
- SHQ->SHQ Transfer
- Replacement Troops buying (auto-replacements do not work through Air Bridges)

When you have Air Bridge into enemy terrain you can use it to do Air Landings which can result in Combat. The defender will have +50% bonus on their attack scores during such a combat.

You can initiate an Air Landing or Air Evacuate by using the Strategic Move Mode. The Air Bridges simply extend your normal road/rail Logistical Network.

The maximum size of Troop types that can be moved through this Air Bridge is equal to the root of (the average cargo capacity in kg divided by 1000) and rounded up.

6.1.6. AIR INTERCEPTING

For each Air Unit you have you can set its Air Intercept order in the Unit Administration Popup Window. The Intercept order is based around the Readiness Score of the Air Unit. This is because Readiness plays a major role in combat performance. Having an Air Unit intercept at 50 Readiness instead of 100 Readiness can easily double the losses for the interceptors.

Air Intercept tests are made during the enemy turn. The Air Units Intercept range is calculated using the Readiness Score instead of the Action Points and diminished with 33%. Interception is never a certainty, but the closer the Interceptor Unit is to the Hex where the enemy Air Units are active and the higher the Readiness, the more chance an Air Intercept will take place.

6.1.7. ANTI-AIR UNITS

If an enemy attacks (or otherwise engages) one of your Hexes any Anti-Air weapons that are in AA-Range will join the defense of the Hex.

Keep in mind that out-of-Hex Units will fire, but will not be able to be targeted themselves.

6.1.8. AIR MISSIONS COMPARATIVE OVERVIEW

A quick overview of some of the particularities:

MISSION TYPE	RANGE	USES UP ACTION POINTS	FUEL CONSUMPTION	COMBAT ROUNDS
Air Recon	Depends on Action Points	Yes	100%	3
Air Strike	Depends on Action Points	Yes	100%	10
Air Bridge	Depends on Action Points maximized for Readiness	No	50%	3
Air Intercept	Depends on Readiness Score acting as Action Points	No	50%	Depends on attackers mission
AA Intercept (out of Hex)	-	No	None	Depends on attackers mission

6.1.9. AIRBASES

Active Airbases produce Airbase Points. These Airbase Points are needed to properly service any Air Units on the Hex.

The needed number of Airbase Points needed is the sum of sqrt(size) of all Air in the Hex.

AIRBASE LEVEL	AIRBASE POINTS
Level I	40
Level II	80
Level III	160
Level IV	320
Level V	640
Level VI	1280
Level VII	2560

If the number of Airbase Points is equal or larger than the Airbase Points needed everything is going just great. However if there are too many Air Forces in the Hex it will result in a decrease of Max Readiness and Readiness Recovery.

Shortage of Airbase Points	Readiness Recovery Modifier for Regular Aircraft	Readiness Recovery Modifier for Vtol, Helicopter or Thopter	Max Readiness for Regular Aircraft	Max Readiness for Vtol, Helicopter or Thopter
25%	-12.5%	-12.5%	75	95
50%	-25%	-25%	50	90
100%	-50%	-50%	10	80

6.1.10. AIR FORCE RESEARCH COUNCIL AND AIR TECHS

It is possible to form an additional Research Council solely focused on research of Air Force related Techs. You can play perfectly fine without it as the regular Military Research Council can discover and research the same Techs. However if you want to focus more on Air Force research while still continuing research on other Techs as well this extra Air Force Council will allow you to do exactly that.

6.1.11. AIR MODEL TYPES

6.1.11.1. MODEL TYPES

Aircraft

Aircraft come in 8 frame sizes. From the Ultralight Aircraft Model Type to the Extra Heavy Aircraft Model Type. The larger the frame the more

engines and weight it can carry. Except for when they are using VTOL engines they'll need Airbases to take off from and to land on.

Helicopters

Helicopters come in 3 frame sizes. The largest one even has two rotors. All helicopters can take off and land anywhere they please. Helicopters are notoriously slow compared to Aircraft and Thopters equipped with Jet Engines.

Thopters

Thopters are superior to Helicopters as they have the same advantage in being able to take off and land anywhere, but being equipped with Jet Engines they can have much higher speeds and thus higher Dogfight Scores.

6.1.11.2. OVERVIEW OF CHOICES

Here follows an overview of the Choices you can make when designing a new Air.

Role

This is an important choice as the role determines in what kind of Formations the Model will be usable, what altitude it will fly and if it will try to dogfight with enemy aircraft…

ROLE	AVOID DOGFIGHTING ENEMY AIRCRAFT?	ALTITUDE
Recon	Yes*	Low
Fighter	No	Low
Fighter-Bomber	No	Low
Tactical Bomber	Yes*	Low
Level Bomber	Yes*	High
Transporter	Yes*	High

*=if possible

Engines

The more powerful the engines the more range and/or maximum speed the Model will have.

TYPE	NOTES
Propellor	Basic start. Heavier ones get very heavy and guzzle really a lot of oil.
Turboprop	33% more power. Heavier ones lose the expensive weight increases and oil consumption. It is definitely an improvement, but not humongous.
Jet Engine	Double the weight and fuel usage, but also double the Engine Power. Requires Machinery Items to build.
Turbojet	Increases engine Power with +100%.
VTOL Turbojet	Same as Turbojet but more expensive to produce and taking more Weight on the aircraft. (max upto 2 engines)
Plasma	Increases engine Power again with +100%
Rotor	More powerful, but Helicopters need that. Also more expensive as helicopters are costly. But they are the first Tech that allows you to land anywhere.
Rocket	Super powerful, but guzzles fuel in amazing quantities

Wings

Only for aircraft. Helicopters and Thopters do not need to make this choice. The larger the wings the more lift, the lower the takeoff speed and the stall speed.

Fuel Tank

The more fuel on board the more range the Model will have.

Air-to-Air Weapon

Used to engage other aircraft.

TYPE	NOTES
Twin Heavy MG	Simplest way to obtain air superiority
MG Cupola's	Simplest way to have some defense against enemy Fighters
Air-to-Air Missiles	Innovation in destroying enemy aircraft from a long distance. The heavier the missile the longer the distance.

Air-to-Surface Weapon

Used to engage ground targets.

TYPE	NOTES
Bombing hatch	Powerful against structural and soft targets
Precision Bombs	Powerful against hard targets
Air-to-Surface Rockets	Innovation in destroying hard targets. More effective than Precision Bombs.

Cargo Space

Used to transport Troops or Items through Air Bridges.

6.1.11.3. VIABILITY

When you are designing an Air Model there is a final viability check being performed before the Design of the Model can start. This Viability check ensures that your parameters will result in a Model that can obtain enough speed to take off and stay in the air and at least have a range of several Hexes.

6.1.12. ANTI-AIR MODEL TYPES

These Model Types compromise the SAM Launcher, Flak Gun and Manpad. All three follow the regular Model Design rules for Land Units.

SAM Launchers have superior range and can reach high altitude aircraft. Manpads are cheap, but are only useful against low altitude aircraft. Flak Guns are in between.

WEAPON TYPE	ANTI-AIR VALUE	TECH LEVEL REQUIRED	ANTI-AIR RANGE	EFFECTIVENESS VERSUS LOW ALTITUDE	EFFECTIVENESS VERSUS HIGH ALTITUDE
Sam Launcher Small	100 (kill-40%)	-	2-4	100%	100%
Sam Launcher Medium	130 (kill-60%)	Tech 3	3-5	100%	100%
Sam Launcher Large	150 (kill-80%)	Tech 5	4-6	100%	100%
Flak Gun 50mm	50	-	0	100%	50%
Flak Gun 88mm	75	-	1	100%	75%
Flak Gun 100mm SHV	100	Tech 3	1	100%	100%
Flak Gun Twin-100mm SHV	200	Tech 5	1	100%	100%
Manpad (Guided RPG Tech)	40	-	0	100%	0%
Heavy Manpad (Heavy Guided RPG Tech)	50	-	0	100%	25%
Super Heavy Manpad (Missile Tech)	60	-	0	100%	50%
MG*	4	0	0	100%	0%
Twin MG Heavy*	20	0	0	100%	0%
Quad MG*	30	0	0	100%	0%

*=Note that any Model with MGs will have some limited Anti-Air value against low altitude aircraft.

6.1.13. AIR FORMATIONS

For a specific Air Formation to be raised you'll need to have developed a Model using the Role that the Air Formation needs. So for example to raise a Recon Squadron you'll need to have designed a Model with the Recon Role.

All Air Formations are accessible without the need to discover them or to operationalize them.

6.1.14. AIR COMBAT

There are a number of special rules you should be aware of.

6.1.14.1. AIR-TO-AIR MISSILES

Air Models with MGs suffer big combat penalties (attacker and defender) in air-to-air dogfighting during the first 2 combat rounds. However Air Models with Air Missiles will have much less or no such penalty and therefore will be very lethal against Air Models just equipped with MGs.

6.1.14.2. DOGFIGHT SCORE

The Air Models will have their Dogfight score ratio used as a modifier, meaning that for example Air Model A with Dogfight Score 20 attacking Air Model B with Dogfight Score 40 will have its attack value reduced with 50%. The reverse effect is also there subject to a square root. This effect is also less pronounced in the first combat round and somewhat during the second combat round, as the initial distances involved will negate any dogfighting advantage.

6.1.14.3. AIRBASE UNDER ATTACK

Any Air Units that are attacked on their own Airbase Hex will suffer combat penalties. Their attack points will be reduced in combat round 1,2 and 3 by respectively -100%, -66% and -33%. Their hit points will be reduced by -66%, -44% and -22%. These penalties simulate the time needed to scramble and get up in the air. It might well be advisable to place some Anti-Air weaponry on Airbase Hexes in order to protect them.

6.1.15. AIR OHQS AND LEADER SKILLS

It is possible to Raise a special Air OHQ. Such an OHQ can have up to 8 Air Units under its command. It allows you to assign a dedicated Leader to command these Air Units.

Such an Air Commander will be able to learn different kinds of air combat related Skills and significantly improve the performance of your air forces.

The following Skills can be mastered:

Air Tactics

This Skill will help improve communications and flight plans of all Aircraft in combat (Increase Attack Value).

Air Intercepts

This Skill will help intercepting Aircraft to most smartly intercept and target enemy attacking aircraft (Increase Attack Value of Defenders).

Air Offensive

This Skill will help attacking Aircraft to use optimal tactics and surprise vectors to target enemy interceptors or grounded aircraft – not used in Air Bridge Missions which are not deemed offensive (Increase Attack Value of Attackers).

Ground Attack

This Skill will help coordinate Aircraft to strike ground targets at the best advantage (Increase Attack Value of Air Attackers versus ground targets).

Aerial Logistics

This Skill will help immensely with getting Air Bridges to perform better than normally expected.

Anti-Air Tactics

This Skill will increase the aim and placement of Anti-Air weapons like SAM Launchers and Flak Guns (Increase Attack Value of ground Defenders versus Air targets).

Against the Odds + Lead from the Front

Also used by Air Commanders

6.1.16. AI RULES DIFFERENCES

The AI gets Free Airbase construction, but still has to pay for their operating costs.

The AIs aircraft do not have Minimum Airbase Level rules, but still need an Airbase to operate.

The AI does not try to establish Air Bridges as for now.

The AI does not get reduced Max Readiness and Readiness regain for insufficient Airbase Points.

6.2. OCEANIA DLC

When rolling a new Planet the Oceania DLC features can be enabled or disabled. On some Planets (with a lot of surface water) it must be enabled and on some (with scarce or no water) it must be disabled.

For a long time the Planet Generation of Shadow Empire was limited to dry Planets and Planets with relatively small bodies of water. With the Oceania DLC you can create second Earths and even Waterworlds. Planets with many islands, or just a few continents. The new maps being generated with the Oceania DLC change the feel and ambiance of the game completely. But it also changes the gameplay a lot and will make you experience a different style of game.

On top of this: the existing land-based Traders have gotten a more organized cousin with the sea-based Traders, who are known as Maritime Trade Houses (MTHs). The MTHs will allow you to explore the Oceans and secure Transport Contracts to invade and/or keep logistics flowing between different continents or islands. The MTH are of a very mercantile nature and it is also possible to acquire their stock. Once a shareholder you can use Policy Meetings with the MTH to influence their attitudes and Dividend payments.

The MTHs will be open to signing contracts with you to Transport Items, Troops and Units between two points. They'll however require payment in cash. So Credits are crucial for a successful expansion and creating a multi-continent or multi-island empire on an oceanic Planet.

The MTHs have their secret hideouts on hidden small islands (abstracted) and atolls as well as floating docks and motherships stationed far out from

the coast. In other words: they do not occupy land hexes and can only be taken out by other MTHs.

6.2.1. THE NATURE OF THE MTH MONOPOLY

The MTHs got such a big head start with naval Tech that at present it is just too difficult to challenge them. You have just started thinking about what's beyond the ocean's horizon while the MTHs have been sailing beyond it for generations. You do not dare to challenge their monopoly and provoke them by building your own shipwarfs now. They would surely destroy them (and maybe you as well)… everybody knows that we should (grudgingly) leave shipping to the Traders. It's how it has always been and will always be. For now at least…

6.2.2. THE CORE MECHANICS

In a nutshell the Oceania DLC will often make it necessary to traverse the oceans to succeed in conquering the Planet. To do this you'll need to sign Transport Contracts with the Maritime Trade Houses (MTHs).



Make sure your Economic Council has BP allocated to its Naval Liaisons Task to generate the Transport Contract Stratagem. Once you have the

Stratagem: Select the target Sea Zone with this Stratagem, later once Contract negotiations start you'll be able to choose your Source Port.

A Transport Contract puts Logistical Points on the ocean Hexes between the agreed upon coastal Hex A and coastal Hex B. This allows you to use Strategic Transfer to move Units between Hex A + B.



Before you can actually initiate Transport Contract negotiations you'll have to be in communications with the MTH. They might contact you, but you can also contact them with the Contact MTH Stratagem.

When playing with Fog of War you'll first have to play some Explore Stratagems on the Seas around you to reveal new islands or continents (or even more Sea Zones).

Note that moving Units overseas depletes the naval Logistical Points provided by the Transport Contract. And such operations are thus limited in nature.

Furthermore it is important to realize that the MTH can only provide you with the agreed upon full amount of Logistical Points if Hex A and Hex B both have Port Points.

Port Points are generated by Port Assets. You can construct these Assets yourself or play a Stratagem to let the MTH construct a Makeshift Port for you. Be aware that if a Port is constructed in round X it will generate Port Points in round X+1, which will be used during the logistical calculations in round X+2.



After constructing a Makeshift Port on the beaches a new Zone will be formed and you'll

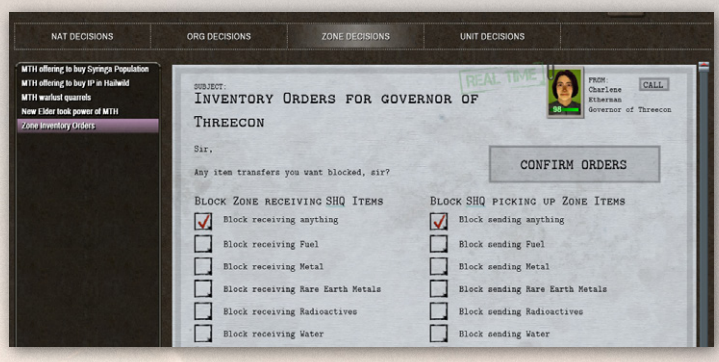
be able to transfer Colonists in to be settled as Workers to operate a future "real" public Port Asset. (Makeshift Port can be upgraded)

You can monitor your current Logistical Points traversing the oceans by enabling the Logistical Point layer (right tab). You can monitor



The Transport Contracts provide Logistical Points going from port-port or from port-beach. They allow you to connect an empire of islands.

Once your multi-island empire grows you'll have some real organizational and logistical challenges on your hands. To economize on Transport Contract costs it might be wise to create a few extra SHQs, or detach some Island Zones from delivery/request from your central SHQ and let them be (semi-) autonomous.



Called the Governor to Discuss Zone Inventory Orders to practically detach the Island Zone from the central SHQ. It will just have to make do with what it has.

Even with the best of optimizing you'll still be dependent on one or more MTHs. Keep in mind that it is possible to become a shareholder and influence the MTH's relations & attitudes. And especially be aware that enemy Major Regimes might become shareholders in the MTH that you need the most. They might turn the MTH against you. Or they might turn another MTH against your MTH leading to naval warfare! Always keep one eye half open on MTH politics.

Once you'll get in the later stages of a game it is definitely not impossible for one MTH to have gone to war with all the other MTHs and to have defeated them all. Only one mighty MTH could thus survive into the end game. When this happens it will become extremely important who controls this MTH the most.

Be sure to assert your influence early on the MTH that will become dominant in the end game.

If you are asking yourself "how do I know which one?" we can only reply to be clairvoyant. If that is not possible, try to get 1 share in most MTHs that matter and read their logbooks well, monitor their cash flow, their naval battle results, etc.. It is possible to develop a sense which MTH is going to be likely to come out on top.

6.2.3. CONTACT A MTH

In order to be able to sign any Contracts or do any other interactions with a MTH you must get in contact with them.

They might contact you, or you might contact them, for the latter a Stratagem is available. On lower difficulty modes you'll even start your game with this Stratagem. Otherwise you'll need the Economic Council and its MTH Liaisons Task.

Just having contact with a MTH is also a good way to obtain quite a bit more information on it.

6.2.4. TRANSPORT CONTRACTS

The Transport Contract puts Logistical Points between a Port and a destination hex. The destination hex can either be a Port or a beach. Note that Transport Contracts can be signed with a source port that is outside the MTHs Sea Zones. The target Hex/Port however must be bordering the selected Sea Zone.

The target Hexes you are being offered are chosen by the MTH. If by some chance none of them please you, you'll have to break-of negotiations and open them again. Very probably new targets will be suggested by the MTH. In short: The more you wish to spend PP and delay the more choice you'll have.

If the destination Hex is not a Port it will mean at best 25% of the Contract's Logistical Points on the trajectory will be effective. As it takes much more effort to unload manually on a savage beach than in a comfy Port, we are not even talking about cliffs or swamps. None-the-less these non-Port destinations do allow for amphibious invasions and emergency evacuations (Dunkerque style).

Just make sure you pay a lot of Logistical Points if you go the amphibious battle route. If you are not expecting serious opposition it will be more efficient to send a small Battlegroup and then build a makeshift Port (Stratagem).

The number of maritime Logistical Points between 2 hexes is the lowest value of the following two:

- Port Points on Source Hex
- Port Points on Target Hex

Any Logistical Points contracted above that lowest Port Points value will still be executed, but for only (25% or even less like with mountains without port), due to the difficulty of loading/unloading without a port.

If you have multiple Transport Contracts active note that the different trajectories will combine into an interconnected-web of trajectories. You are much advised to make sure the different trajectories connect with each other to allow you to use Strategic Movement over much longer distances than each individual Transport Contract.

6.2.4.1. CONTRACT DELAYS

Keep in mind that if you contact the MTH to discuss a Transport Contract on turn T, the Contract will be concluded on turn T+1 and the actual Logistical Points will arrive at turn T+2.

6.2.4.2. PRICE OF TRANSPORT CONTRACTS

The price of the Contracts is very sensitive to the following:

- Number of MTH Ships left for fulfilling the Contract
- Your relation with the MTH
- Your stake in the MTH (shares)
- The length and the scope of the Contract (the longer/ the bigger the cheaper)

This makes it interesting for you to:

- Buy stocks in MTHs
- Sign long term Contracts

6.2.4.3. AMPHIBIOUS LANDINGS

If you are shipping Units straight on top of non-friendly Units then combat will commence upon landing. The defenders of the Hex will have a +50% bonus on their attack values as your troops are disembarking and present a relatively easy target to the defenders.

The other main disadvantage is you can only initiate amphibious combat piecemeal. This simulates the need to approach the disembarkation beaches in waves. But is also done to discourage the player from going for direct invasions of important enemy coastal strongholds. That being said this can be countered by raising special large Independent Formations like

full Regiments or even Divisions to provide the necessary shock to win amphibious combat.

6.2.4.4. ITEM WEIGHTS DURING MARITIME TRANSPORT

Note that items like Water, Energy and Fuel have a weight of 1 point during naval transport. Opposed to their 0 weight when transported over land.

6.2.4.5. PORTS

Remember you can construct Public Ports yourself and / or nationalize Private or Makeshift Ports. Ports are crucial to get the most Logistical Points out of your Transport Contracts.

Note that if there are edible marine Lifeforms on your Planets most Port Asset Types will provide you with some Food Production as well.

Ports produce Port Points and it is those Port Points that facilitate Logistical Points to travel overseas. Keep in mind that there is a delay. If you construct a Port in turn T it will produce Port Points in turn T+1 and these Port Points will be used by the MTHs in turn T+2. (as production phase takes place after logistical network phase)

6.2.4.6. RENEWING AND CANCELING TRANSPORT CONTRACTS

If you go to the MTH Contracts Report you can click on any Contract to open its details in a Popup Window. This detailed report also provides you the option to Extend or Cancel the contract.

Renewing a contract is an immediate but also a very improvised way to go about things and it doesn't help your negotiation position. The MTH will demand slightly higher prices (though this depends on their Greed Rating) and notably there are no price reductions for concluding longer term contracts. However the effect is immediate as it concerns an addendum to an existing Contract, so if a Contract is about to expire it could be wiser to Renew it than to demand a new Contract Negotiation by playing a Stratagem on turn T, use turn T+1 for negotiation and actually having to wait for T+2 for the Logistical Points to appear.

It is also possible to Cancel a contract. This will return at best 50% of the funds invested, on the condition that the MTH has sufficient funds to do

so. Furthermore these refunds can be disappointingly lower if the MTH has a high Greed Rating.

6.2.4.7. FORCE MAJEURE

Please be aware of the fine print on the MTH Contracts. It is possible that due to naval warfare your MTH loses the Sea Zone that allowed it to fulfill your Contracts. If this happens the MTH will no longer be able to provide the promised services and will declare "Force Majeure" or forfeit on its contractual obligations. You will be notified, but you will not be reimbursed if this happens, as per the relevant sub clause in the Contract.

Note that Transport Contracts have a Source and a Target Hex and that Force Majeure is only applied if the MTH loses access to the Target Hex.

6.2.5. INFORMATION EXCHANGE AND RECON CONTRACTS

These are relatively inexpensive contracts that will make the MTH share recon with you on a specified Sea Zone.

The transfer of maps is slow, sometimes even involving some last-minute actual exploration by the MTH in question. On top of that the MTH is deliberately trading time and Credits for information.

These Information Exchange Contracts will lead to you learning of the Maritime neighbors of the Sea Zone under exploration. You can then subsequently sign new Exploration Contracts. Or you'll discover islands and new continents that can consequently be invaded using a Transport Contract.

The Recon Contracts are similar, but more expensive. They do an even better job on revealing Sea Hexes (2x better job versus at least 3x the cost). The Recon Contracts prime use is to gain better Recon on the coasts of the Sea Zone targeted.

An Information Exchange Contract will get you 5 Recon Points on Coastal Hexes and 2 further inland.

A Recon Contract will get your 20 recon Points on Coastal Hexes, than 5 further inland and then once again 2 further inland. On top of that any Port Hex will provide the MTH (and thus you) with a whopping 100 Recon

Points, 20 further inland, 5 even further inland and then 2 even further further inland)

Note that a MTH can only explore Sea Zones for you that it controls. They might find a neighbor controlled by another MTH. If you want to continue exploring you'll have to contact that other MTH and sign an Exploration Contract with them.

Note that you'll receive free recon on the Hexes in the trajectory of any active Transport Contract.

6.2.5.1. AUTOMATIC EXPLORATION

With an Exploration Contract a lot of Hexes are revealed. There is however also a second way to gain information on the Sea Zones. It is a slower effect where an MTH you're in communication with always leaks some bits of information on any of its Sea Zones during discussions, brunches and radio contact. This information leakage will be more important if you own more Stock and/or have more Contracts signed.

6.2.5.2. PERMANENT RECON ON SEA HEXES

Once you have had any Recon Points on a Sea Hex you'll always keep at least 1 Recon Point on them. Permitting you to target the Sea Zone in question with MTH Stratagems and to know which MTH controls the Sea Zone in question.

This means you'll have full visibility on all MTHs if you play with Partial FOW.

6.2.6. MAKESHIFT PORT CONSTRUCTION

Only the MTHs are capable of constructing a Makeshift Port for you. You can order them to do so by playing the Makeshift Port Stratagem. Makeshift Ports cost 250 Credits. A Makeshift Port does not allow many Logistical Points to use its loading & unloading facilities, but it is operated with minimal MTH staff and as such it does not require any of your Workers or Population.

If it concerns a "No Zone" Hex the Makeshift Port Stratagem allows the formation of a new Zone and for you to send Colonists. After you have some Workers in place you can then Nationalize the Makeshift Port into a regular Port.

6.2.6.1. PORTS AND ZONE CREATION

In order to facilitate amphibious operations and allow Regimes to send Colonists to beachheads to build Assets there is a new Zoning rule. Any Port that finds itself isolated and without a Zone will create a Zone itself. This also happens immediately after using the Makeshift Port Stratagem (if no Zone is present).

6.2.7. MTH SHARES

MTHs function very much like stock-exchange listed companies. With the exception that the sea-based Traders are unwilling to lose control. It is possible to buy up to 50% of the Shares of a MTH. The MTH will use at least a part of the capital thus acquired to construct more Ships.

Having stocks in a MTH gives three advantages. First, it gives you dividend payments and a reduction on the price of Contracts. Second, being a Stockholder in a MTH allows you to organize Policy Meetings where you can try to influence the attitudes of the MTH by spending your Influence Points. Third, it gives you more information on the MTH (and its other shareholders)

Influence Points build up over time and the speed of acquisition depends on how big a shareholder in the MTH you are.

Note that Dividend payments are dependent on the Expansionist Rating and Greed Rating. MTH's with high Expansionist Ratings prefer using the Credits to improve their position and will try to save up more Credits before considering Dividend payments. Upon payment MTH's with greater than 50 Greed Rating will give less, while those with less than 50 Greed Rating will give more.

6.2.7.1. AUCTIONS

MTHs can decide to hold Auctions to sell Shares. When this happens every Major Regime in contact with the MTH will be allowed to bid. Being the highest bidder will help you win the Share. Note that an MTH will weigh the bid of a Major Regime on its Share with their relation. A bad relation means that your bid will be valued lower than the face value of the bid. So Credits aren't everything and the MTH actually care about who ends up buying their Shares.

It is also possible for Major Regimes to sell Shares through an Auction of their own by using the Auction Stratagem.

Note that the Greed Rating will influence the minimum sales price for MTH organized Auctions.

6.2.8. OCEAN STRATEGY TIPS

If you want to dominate and spread out beyond the Oceans you cannot just build Ships, like you would build Tanks, and fight it out with the other Major Regimes. Instead you'll have to make sure you generate enough cash (Credits) to pay for your Transport Contracts. Credits is king to spread out over the Seas.

In the long term you'll have to dominate the MTHs by buying their Shares and then ensuring your MTHs win the competition and battles with other MTHs. An MTH dominated by you, as the shareholder, will allow you to manipulate and push that MTH to impose exorbitant prices on your Major Regime rivals.

In the end in order to dominate the Oceans you will thus need a lot of Credits to pay for your Transport Contracts as well as a keen sense in which MTHs to invest.

An alternative to MTH Transport Contracts is the use of Air Bridges. These however are less interesting from a cost-benefit ratio perspective. The quantity of Logistical Points they'll provide is relatively low compared to their (maintenance) cost. Remember that this game's Air Bridges are intended to be used to do short term operations behind enemy lines (Arnhem Bridge style) and not so much to do permanent Air Bridges (Stalingrad resupply/ Cold War Berlin Air Bridge).

6.2.9. USING SHQ ADMIN OPS

Unless you are very rich, being able to afford all the Transport Contracts you want, you will probably end up in a situation where you have less Logistical Points on the ocean trajectories than you'd like. It is possible to use the SHQ_ Admin order to disallow certain forms of usages of Logistical Points going out to the Oceans. You can separately enable/disable:

- Unit Supply
- Zone Supply
- Zone Pickup

Remember you can also call Governors to set Zone Inventory Orders and stop their Zone requesting or delivering certain types of Items.

6.2.10. MOVING UNITS OVER OCEANS

This is very simple and similar to using Air Bridges. First you make sure you switch on the "Current Logistical Points" layer so you can see the maritime Logistical Points. Then you use Strategic Movement Mode to move a Unit overseas. Just make sure the Unit you have selected is not heavier (in Weight Points) then the maritime Logistical Points available, because that will not work.

Keep in mind you'll need to play a "Declare War" Stratagem (Foreign Affairs Council can generate these) to declare war before invading in some cases.

6.2.11. INTER-MTH POLITICS

Each MTH has a relation score with all the other MTHs as well as with all Major Regimes. The relation with other MTHs determines the chance they will go to war and have naval battles, while the relation with Major Regimes determines mostly the price the Major Regimes have to pay for their contracts. Though a low relation here will definitely encourage piracy and Trade Policy abuse as well.

6.2.12. MTH INTERNAL POLITICS

Each MTH has its own internal politics concerning how to manage its treasury, how many dividends to pay out and how many ships to build. Once the current MTH Elder loses enough support a change of leadership within the MTH is possible. It is possible to help reduce or increase support for the current Elder through Decisions and Policy Meetings. Such a change in leadership once it takes place will result in new MTH Ratings. The Greed and Warfare Rating will tend to stay relatively close to the previous ratings, but the Aggression and Expansionist Ratings have a tendency to reverse direction. Keep in mind that MTH Feats and Profile never change as they reflect their broad culture. Furthermore your relation with an MTH might change upon leadership change, mostly depending on whom you where supporting before the change took place.

6.2.13. PIRACY

Minor Regimes can engage in Piracy Contracts with MTHs to invade Major Regimes. Normally only a faction of Minors will be interested in Piracy, but difficulty level and the Aggression of the Minor Culture impacts this a lot.

It requires a Minor Regime and a MTH to both be interested in signing a Piracy Contract. MTHs with a high Aggression Rating are more prone to signing Piracy Contracts (it adjusts the MTH Piracy Attitude).

Piracy in action will involve the MTH shipping Minor Units from their Zone to the beaches of the target Zone. There they'll build a small FreeFolk base on the coast that will act as their base of operations and source of supply.

If you own stock in MTH you can see the MTH Piracy Attitudes (different for each Major Regime) and you can influence those Piracy Attitudes through Policy Meetings. Note that you can only Discourage Piracy against yourself, but you can specifically Encourage Piracy against a specific Major Regime. If the Piracy Attitude drops below -50 the MTH will refuse a-priori to facilitate any such operation. If it goes above +50 the MTH will actually push Minors to engage in Piracy and increase the range of operations for Pirates.

6.2.14. FOUND NEW MTH

On some (Robinson Crusoe) Planets there might be Sea Zones present that start the game without a MTH. Since MTHs will only have formed on Oceans where there is at least some minimal trade possible.

For these rare cases there is a Stratagem available to found a new MTH yourself. This Stratagem pushes some of your land-based Traders into the business of shipping. This Stratagem costs quite some Credits but when played will provide you with a good initial relation and also 25% of the new MTH's Shares.

6.2.15. MTH STRATAGEMS OVERVIEW

Here is an overview of all the MTH Stratagems you'll have available.

STRATAGEM	COUNCIL
Information Contract	Economic Council
Transport Contract	Economic Council
Recon Contract	Economic Council
Contact MTH	Economic Council
Makeshift Port	Economic Council
Policy Meeting	Economic Council
Shipyarding	Economic Council
Intel Support	Economic Council
Sell A Share	Economic Council
Demand Auction	Economic Council
Startup MTH	Economic Council
Resource Rumors	Secret Service Council

Note: The "Declare War" can be generated by the Foreign Affairs Council. This Stratagem can be necessary to play in order to do amphibious invasions.

6.2.16. INTER-MTH WARFARE

When relations between MTH degrade (and/or one of them is very aggressive) they can go to war. The chance that an MTH goes to war increases with lower relation level with the other MTH, a high Aggression Rating and a good Fleet advantage.

This can lead to Naval Battles and the conquest/loss of Sea Zones and even the eradication of the losing MTH if it concerns its last Sea Zone.

The most important factors for MTH success during naval battles is the amount of ships they can bring to bear over time as well as their Warfare Rating. Due to the relative huge size of the Seas (compared to # of ships) there are no huge naval battles, but mostly single ship confrontations. The MTH that has a bigger Fleet will have a slight to moderate advantage.

Fundamentally MTH naval warfare is attritional in nature, albeit, as mentioned, offset by the Fleet size advantage and the Warfare Rating.

Note that the loss of Ships, like having more Contract Tonnage signed than Tonnage available, might lead to a reduction of Logistical Points delivered to clients. Ships participating (but not sinking) in battles will only be able to do partial Contract service and provide only half their regular Tonnage.

Note that it is possible that MTHs make peace again as well. This is harder if the "winning" side is an MTH with a high Aggression Rating. It is easier

if relation levels have somehow recovered (Shareholder influencing could cause this).

Don't forget to read the Logbook of the MTH you have shares in, especially during naval warfare.

6.2.17. SPECIAL TRADE RULES

MTHs trade with Land Traders just the same as Land Traders trade with other Land Traders.

However there are a few extra price modifiers being applied.

The maximum quantity of items that can be traded between a Land Trader Zone and an MTH depends on the number of Port Points. A quantity of 50 Items can always be traded through using beaches, but this is limited. Each 5 Port Points increase the quantity that can be traded with +1 Item quantity.

Greed Rating can cause the MTH sell prices to increase, up to double, and the MTH buy prices to decrease, at most halved. This gives the MTH less trade, but when it trades it will make trades hughley in its advantage.

If an MTH has the Abuse Trade Policy against a Major Regime, its Land Traders will have to pay 2 times the market price to buy at the MTH and the market price for selling to them will be divided by 2. If an MTH has the Stranglehold Trade Policy against a Major Regime, its Land Traders will have to pay 4 times the market price to buy at the MTH and the market price for selling to them will be divided by 4.

Trade between MTHs on the high seas, without an intermediary Land Trader is difficult. Maximum 20 Items can be traded between any MTH Sea Zone border. And nothing can be traded if the MTHs are engaged in naval warfare with each other.

Note that even if an MTH gets some of its Zones separated (or pocketed) all Zones keep using the same Item inventory. The Seas are porous (and large) enough to allow transfer of Items through non-friendly waters by a cargo ship that wants to avoid confrontation. However once the last Sea Zone of an MTH gets taken over its inventory will fall in the hands of the victorious MTH that took that last Sea Zone.

6.2.18. TRADE POLICY

Each MTH has a Trade Policy towards each Major Regime. Having a low relation with a MTH, especially a greedy MTH, might result in the MTH changing its Trade Policy from Fair to Abusive, and possibly even Stranglehold. An Abusive Trade Policy will decrease their buy prices and increase their sell prices when they deal with land-based Traders based in your Zones. Furthermore it will increase the cost of Contracts. Abusive Trade Policy doubles prices, Stranglehold quadruples. By improving relations with the MTH you'll increase the chance their Trade Policy towards you will return to Fair.

6.2.19. MTH PROFILES AND FEATS

Each MTH has 1 or 2 Profiles and a MTH Feat. These give specific characteristics to the MTH. They are permanent and in place for the remainder of the game. Use the mouse overs in the MTH Report to obtain more detailed info on each Profile and Feat.

6.2.20. MTH ALLIANCE

It is possible for an MHT to offer you an Alliance. If you accept, you'll agree to a very big deal. A deal to give the MTH plenty of influential positions (like Directors and Governors) in your Regime in exchange for an Alliance Price Divider (between 3 and 6 times lower Contract prices).

Signing an Alliance thus has advantages and disadvantages. It is a very interesting option to consider, particularly if you are running low on Credits. Paying 4 times less on Transport Contracts just might make it possible to extend yourself overseas…

The Alliance Price Divider will be higher if MTH has Government Profile or the Jolly Crew MTH Feat. The Alliance Price Divider will be lower if MTH has Autocracy Profile or the Moneygrubbers MTH Feat. There is a random element involved in the Alliance Price Divider as well.

As soon as you have (close) to the required number of MTH Leaders on SHQ/Governor/Director positions you'll start to pay lower prices (the Alliance Price Divider) during new contract negotiations. The MTH will also consider you a solid partner and you'll see your relations improve. Also Piracy Attitude and Trade Policy will improve in your favor.

However if after a reasonable period of time you have not appointed sufficient MTH Leaders your relation with the MTH will nose dive. Up to the point where the MTH will cancel the Alliance. The "reasonable period" is about 10 rounds, after this time has passed negative relation effects start to sneak in and these reach full force about 20 rounds after signing the Alliance.

Once an Alliance is in place the MTH will offer you MTH Leaders. Note that these are almost always young and inexperienced, with relatively low Capacity Levels, except when the MTH also has the Meritocracy Profile.

Every 10 rounds (or so) there will be an Alliance review Decision which gives you the possibility to cancel the Alliance.

Note that the Relation Score of MTH Leaders will tend to drop towards your relation with their MTH. They also lose Relation Score if they are not in their "promised" Governor, Director or SHQ Commander job. If the Leader's MTH disappears for some reason their old MTH loyalties will become void. If the Alliance ends, but the MTH is still there, they'll no longer take a hit for being in the wrong job or Reserve Pool, but their Relation Score will still tend towards the MTH Relation Score.

Note that you can only have one Alliance partner. Ever. You can remake an Alliance later with your original partner if it got canceled at some point. The exception to this rule is the complete disappearance of the original Alliance partner.

6.2.21. INTEL ON MTHS

You need to be at least in communication with a MTH to get any useful information on them. Note that having an Alliance with an MTH also gives you shareholder level information.

INFORMATION	CONDITION FOR INTEL
MTH name	None, except have Recon on one of its Hexes
Relation	None, except have Recon on one of its Hexes
Regime Feat	None, except have Recon on one of its Hexes
Piracy Attitude on you	Communication
Fleet size , Tonnage av/used, Price Analytics	Communication
Dividends paid total & masked shareholder info	Communication
MTH Leader Info	Communication
MTH Ratings	Communication
Trade Prices	Communication
Piracy Attitude on other Majors	Shareholder
Treasury	Shareholder
Precise shareholder info	Shareholder
Position of Leader	Shareholder
Profile	Shareholder
Contract compendium	Shareholder
Trade Logs	Shareholder
Relations with other Majors and MTHs	Shareholder

6.2.22. MARITIME CRITTERS

When Oceans are present then animal Maritime Lifeforms will be simulated as well. There are 3 different movement type variations of them. First fully aquatic ones. These might hug your coast, but will not bother you much as they can't leave the Oceans. However there are also semi-amphibic and full-amphibic variations. These can respectively enter coastal Hexes and any, but mountainous Hexes.

Maritime Lifeforms are much harder to kill when in a Sea Hex than on a Land Hex. It depends on the exact (sub) species but on average count on them being 4x harder to kill when able to submerge to the depths.

6.2.23. NOTES ON THE AI CONCERNING THE MTHS

Opposed to the land-based logistics the AI plays by the rules here. It needs to pay for its Contracts, organize a multi-SHQ and/or autonomous Islands empire and will try to participate in buying MTH Shares and using Influence Points gained by being a shareholder.

That being said the AI does have an advantage concerning information being passed to it by the MTHs. It does not need to play Explore Contract Stratagems. There are also a few other small bonuses the AI gets concerning Port construction, the minimal size of contracts and the price of contracts. The AI tends to be less daring and less creative in creating a logistical network so the advantages and disadvantages more or less even out each other. Furthermore the AI is limited to keeping operations within a certain range, especially at the start of the game and especially on the lower difficulty levels (this offsets it not needing Explore Contracts).

6.2.24. NOTES ON PLANET GENERATION

Unless you are playing on the more realistic higher difficulty levels there will be a bit more chance to find metals/oil on Planets with a lot of sea surface than you would otherwise expect. This has been done for the sake of gameplay.

Having said the above, be aware that you'll still often struggle on the mining front as the higher chance does not completely offset the reduced number of land hexes. Some extra resources might enter the ecosystem through MTHs that engage in Sea Mining (see MTH Feats).

7. CREDITS

VR DESIGN

Game Design
Victor Reijkersz

Programming
Victor Reijkersz

AI Development
Victor Reijkersz

Manual Writing
Victor Reijkersz

Artwork
Bernd Brossig, Frederic Genot, Victor Reijkersz and others

Music & SFX
Tempest for an Angel and others

Post-release proofreading
Tom Try

MATRIX

CEO
Iain McNeil

CFO
JD McNeil

Technical Director
Philip Veale

Creative Director
Richard Evans

Marketing Director
Marco A. Minoli

Senior Producer
David Sharrock

Producers
Bart Schouten, Neil McKenna, Erik Rutins

Assistant Producer
Dan Zsibrita

Product Manager
Alberto Casulini, Daniele Meneghini

Social Media Manager
Bruno Bontempo

Media Relations
Paolo Paglianti

Production Design
Adriana Bienati

Marketing Executive
Roberta Migliori

Lead Artist
Pat Ward

Artist
Koen Bekkema

Manual Layout
Myriam Bell

Production Lead
Matthew Ravenwood

Production Team
Sam O'Neill, Joseph Stephenson

Administration
Dean Walker

Admin Assistant
Richard Baker

Customer Support Staff
Paulo Costa, Joseph Miller

Web Development
Valery Vidershpan, Andrea Nicola, Fernando Turi

ADDITIONAL CREDITS

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