GHOST PLANETS ADVENTURES OF THE XENDHISTORY CORPS

Don Bisdorf





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GHOST PLANETS

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Ghost Planets

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This is a game where people make up stories about wonderful, terrible, impossible, glorious things. All the characters and events portrayed in this work are fictional. Any resemblance to real people, interstellar archaeologists, faraway planets, astonishing alien artifacts, faithful robot pilots, or civilization-destroying catastrophes is purely coincidental, but kinda hilarious. オスワ リルキ らい いんてん

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CONTENTS

Introduction	2
Getting Started	
Creating Characters	4
Xenohistory	8
Discoveries	8
Research Actions	8
Roles	11
Designing Discoveries	
Team Efforts	
Other Actions	18
The Sigma Event	19
The Sentinels	
The Truth?	20
Our Place in the Galaxy	21
The Desperate Past	
Extraterrestrial Operations	
New Horizons	
New Opportunities	
Technology	
Equipment	24
Personal Equipment	
Heavy Equipment	
Spacecraft	
Ship's Robot	
Scale and Stress	
Farther Stars	35
Galactic Zones	
Points of Interest	
Missions	38
Objectives	
Leadership	
Emergency Protocols	
The Doomsday Clock	40
Mission Objectives	40
Pākurakura	40
Arrival	41
The Indies	
Discoveries	
Sigma	50
Events	51
Afterwards	55



INTRODUCTION

In the twenty-third century, when humanity learned to travel interstellar distances within weeks instead of decades or centuries, we found that intelligent life had once flourished throughout our galaxy. We discovered cities, space stations, star-faring vessels, and wondrous artifacts produced by science beyond human comprehension.

But those cities were silent. Those ships and habitats were vacant, and those impossible devices had been dormant for millennia. Thousands of alien civilizations had occupied the stars of our night sky, and all of them were now extinct.

The World Council established the Xenohistory Corps to investigate these ghost planets and to determine what had happened to their former inhabitants. In some cases, the causes of these extinctions were tragic but understandable war, or plague, or environmental collapse. The Corps refers to these catastrophes as Omega Events. But on many of those distant worlds, the sudden disappearance of the inhabitants left no trace of violence or disaster. The scientists of the Corps believe these extinctions were caused by the same unknown influence, repeated over and over across the course of eons. They labeled this the Sigma Event.

The truth behind this mystery may determine humanity's survival. If the Sigma Event has silenced all other forms of intelligence in our galaxy, will it eventually extinguish human life as well? How much time remains? Centuries? Months? Hours?

The Corps hopes that understanding the Sigma Event may help us to escape it. Far off in the galaxy, Corps explorers and scientists search through the abandoned relics of inhuman beings, hunting for answers. They must survive hostile environments, decipher ancient clues, and confront the miraculous and terrifying products of transcendent technology.

If they fail, our Earth and all the worlds we call home may become the next ghost planets.



GETTING STARTED

Ghost Planets is a game about venturing into the unknown depths of space, encountering bizarre threats and ancient wonders, and solving mysteries whose answers may save humanity from extinction.

Your characters are members of the Xenohistory Corps, an organization dedicated to investigating the relics of alien civilizations. Corps researchers are explorers and scientists, chosen for their expertise, their insight, and their courage. They risk their lives on distant worlds, driven by their thirst for knowledge and adventure, and by their determination to discover the truth behind the Sigma Event.

Ghost Planets combines the eerie enigmas of the movie *Forbidden Planet* with the planet-hopping idealism of the original *Star Trek* series. Xenohistory researchers combine their diverse backgrounds and unique perspectives to solve problems as they journey through the galaxy, and their stories never let scientific accuracy get in the way of a good adventure.

Use these setting aspects:

- The Xenohistory Corps' mission is critical because SIGMA Is COMING. The PCs cannot afford to hesitate, because every day that passes might be humanity's last. They cannot turn away from danger, because every world they visit might contain a vital clue. They must be clever, bold, and swift, because if they are not, Sigma may put an end to another star-spanning civilization—ours.
- The lives of the PCs are never dull because SPACE IS MYSTERIOUS AND DANGEROUS. Although Sigma has eliminated all other forms of intelligence in the galaxy, hostile forms of life still lurk in alien jungles, in un-Earthly seas, and in shadows untouched by any sun. Explorers of distant worlds will find skies filled with poison, radioactive wastelands, and storms that could swallow planets. And although the darkness between stars is vast, it is not empty, and unimaginable perils drift in the night's void.

Creating Characters

You'll create characters for *Ghost Planets* as you would in *Fate Core*, including the following special rules for aspects and skills.

Aspects

Your character will have a high concept, trouble, **homeworld**, and two other aspects.

Your high concept must include your research **role**, which will be one of the following:

Analyst	Experimenter	Sleuth
Empath	Explorer	Visionary

For example, you might be an Absent-MINDED EXPERIMENTER or a SPOILED RICH VISIONARY. For more information, read the *"Roles"* section (page 11).

Choose your trouble aspect as usual.

One of your remaining three aspects must be a homeworld aspect, which describes the environment you grew up in. You might be the DAUGHTER OF ASTEROID BELT MINERS, or possibly you TRAINED STOMPLIZARDS ON CONTRERAS. If you grew up on Earth, you might have been a WORLD COUNCILOR'S DUTIFUL SON or a MEMBER OF A LONDON STREET GANG.

Your last two aspects should describe your prior experience working for the Xenohistory Corps and with your teammates. If you used to be a member of the Exploration and Survey Corps or the Extraterrestrial Police Force, one of these aspects can describe your experiences with that organization. For example, you might be the SOLE SURVIVOR OF THE ROLVSØY EXPEDITION, or you might have ARRESTED THE COLONIAL GOVERNOR OF NIKOLSOKYE.

GETTING STUCK

Getting stuck during an investigation can grind the game to a halt. To get things moving again, players, you can invoke one of your character's aspects to ask the GM for a hint that's appropriate to the aspect invoked. For example, if a character is TEDIOUSLY KNOWLEDGEABLE ABOUT SPACECRAFT, she might become curious about something in the design of an alien ship's life-support systems.

Alternately, the GM can compel a character's aspect to drive them in the right direction. As always, this should also introduce a new danger or complication for the PCs to overcome.

Skills

Ghost Planets uses the default skill list from *Fate Core*, with a few modifications. Here is the skill list, with new skills shown in italics:

Athletics	Culture	Influence	Physique	Stealth
Burglary	Deceive	Nature	Pilot	Tech
Combat	Empathy	Notice	Science	Will

UPDATED AND REMOVED SKILLS

We've removed the Contacts skill because Xenohistory teams spend much of their time on planets that are deserted or only have small colonies. We've also removed the Resources skill because there aren't many opportunities to go shopping in deep space.

The Combat skill combines Fight and Shoot. You may use Combat to defend against all physical attacks, which represents using your superior knowledge of tactics and positioning to avoid harm.

MY SIDEARM IS A SLIDE RULE

GMs, you should examine the skill ranks of your PCs when you're planning conflicts, especially if you're accustomed to Fate games where the heroes can defeat hordes of bloodthirsty opponents. PCs in *Ghost Planets* will typically have research and investigation abilities as their higher skills, and will have Combat and Athletics at lower levels.

The Drive skill is now called Pilot, and allows you to operate all types of vehicles, from snow rovers to gravity fliers to spacecraft.

The Influence skill combines Rapport and Provoke. A skilled negotiator knows that speaking a harsh truth can be just as effective as offering a kind word. You can use Influence to deliver mental attacks, just as you would with Provoke.

We've also removed Lore and Investigate, replacing them with Culture, Science, and Nature. The Tech skill is also useful for investigation.

Use Nature for physical recovery, and Empathy for mental recovery.

CORPS TRAINING

You may find it easier to choose your skills if you decide how your character will contribute to your team's missions. To do so, choose three skill packages from the list below, plus one skill from a fourth package, then arrange your ten skills in the standard Fate pyramid.

- Scientist: Culture, Science, Tech
- Explorer: Athletics, Pilot, Nature
- Negotiator: Empathy, Influence, Will
- Infiltration: Burglary, Deceive, Stealth
- Security: Combat, Notice, Physique

You don't need to use these packages, and you can pick your skills individually if you prefer.

NEW SKILL: CULTURE

The Culture skill helps you to understand the society, art, language, and philosophy of the people who once lived on the planets you visit.

Overcome: Use Culture to deduce a society's motives or to understand δ their symbols and languages. Why did they construct this fortress? What does this inscription say? Why was this statue important?

Create an Advantage: You can create aspects to represent the benefits of your investigation into an effect of the second secon of your investigation into specific facets of an alien society. If you have STUDIED THEIR MYTHS, it might be easier for you to interpret some of their murals later. If you construct a TIMELINE OF THEIR HISTORY, you might be able to explain what event left a crater in their largest city.



Attack: You don't attack with Culture.



Defend: You don't defend with Culture.

You can also use Culture to overcome or create advantages when you need to understand the customs, hierarchies, and conflicts developed by human colonies.

NEW SKILL: NATURE

The Nature skill encompasses your knowledge of the natural world, including climate, biology, and geology.

Overcome: Use Nature to produce important environmental information, such as predicting the path of a storm, tracking a creature through the wilderness, or determining whether an alien plant is poisonous.

Create an Advantage: This skill allows you to manipulate natural environments to your benefit. You could harvest vegetation to prepare a Potent Natural Remedy, or construct a Camouflaged Trap to capture a native creature.



Attack: You don't attack with Nature.



Defend: The GM may allow you to use this skill to defend against envivor ronmental attacks, such as heat exposure or frostbite.

NEW SKILL: SCIENCE

The Science skill measures your knowledge of physics, atomic principles, and inorganic chemistry.

Overcome: You may use Science to determine a scientific fact, such as the minimum safe distance a ship must maintain from a black hole, or the chemical composition of a fluid found in a sealed vat.

Create an Advantage: Some of the information you learn using Science might help you solve other problems. You might find the FRACTURE POINT that lets you split an asteroid in half. It might be easier to penetrate a force field after you've MEASURED ITS ENERGY FREQUENCY.



Attack: You don't normally attack with Science, though the GM may permit it if you're employing advanced scientific theories to defeat a foe.



Defend: You don't defend with Science.

NEW SKILL: TECH

The Crafts skill is now Tech, which allows you to work with both human and alien machines, including computers.

Overcome: With Tech, you can build, repair, or alter machinery, or analyze the function of existing machinery. Tech also helps you to bypass computer security systems.

Create an Advantage: You could build a FLARE Вомв to blind a hostile creature, or design a Software Virus to cripple a spaceship's navigation systems. You might find that a machine has UNRELIABLE SERVO MOTORS or is Rigged to Explode.

Attack: If you have access to a computer through its physical controls or a remote connection, you can attack it using Tech. This is a mental conflict, and the computer defends with its Tech. Similarly, you can use Tech to attack the computer systems within a robot or vehicle.



Defend: While you have access to a computer, you can use Tech to defend it from software attacks.



XENOHISTORY

Exploration and investigation are the heart of a *Ghost Planets* scenario. Use the research rules in this chapter to represent the challenges and dangers of scientific research on alien planets.

Discoveries

Many of the relics left behind by vanished civilizations are incomprehensible at first glance—tools held by strange appendages, machines designed from unknown scientific principles, languages formed for inhuman throats, and memorials constructed for forgotten histories. Xenohistory researchers must apply a wide array of scientific knowledge to decipher the meanings of these relics and reconstruct an image of the society that produced them.

Just the same, the natural environments of alien planets can conceal mysteries of their own. When life evolves in an environment with binary stars, or intense radiation, or the complete absence of atmosphere or gravity, the resulting ecosystems can provide fascinating and deadly surprises for a Xenohistory team.

Studying alien objects, creatures, and concepts can reveal hidden facts called **discoveries**. Researching an extraterrestrial fruit might lead to the discovery that the fruit can be used as a power source, while translating the carvings on a cliffside might allow you to discover the creation myth of the planet's former inhabitants.

Research Actions

To reveal a discovery, you must announce what you're researching and how you're researching it. The method you use must be appropriate to the research role in your character's high concept.

When you've decided on your approach, you and your GM agree on what skill is appropriate. Most often, you'll use Tech, Culture, Nature, or Science. Empath characters may use Empathy. GMs, you should allow players to use any skill they can justify with a reasonable explanation.

FATE: WORLDS OF ADVENTURE



Your GM will announce the level of passive opposition to your research, and how long your research will take to complete, in story time. You can then decide whether or not to proceed with the project.

To conduct your research project, you'll roll to overcome using your chosen skill. If you succeed, you reveal a discovery when your research is complete. Any shifts you earn reduce the time required to perform the research, according to the guidelines in *Fate Core* (page 197). If you succeed with style, you also earn a boost when your project is complete. You can use this boost to benefit an action related to your discovery, or to assist any other research project.

A tie or a failure produces a discovery *and* a **mishap**. A mishap will endanger the characters or complicate their mission. A mishap may occur at any time during or after the research project, but does not prevent the project from revealing the discovery. A tie produces a minor mishap, and a failure produces a major mishap. To devise mishaps of the appropriate severity, use the guidelines for succeeding at a cost in *Fate Core* (page 189).

While your research project is ongoing, your character receives a RESEARCHING aspect with no free invokes. This aspect represents the fact that your character is involved in a series of experiments and observations, and it remains in place until your character completes or abandons the project. If you abandon the project before the required time has elapsed, you do not reveal a discovery, even if your roll was successful. You may not participate in multiple research projects at a time.

The work that a character performs for a lengthy research project occurs in between scenes. A character with the RESEARCHING aspect may participate in scenes without interrupting their project, unless an event occurs that makes it impossible for the project to continue. A character's RESEARCHING aspect can be compelled to indicate that they are distracted or sleep-deprived because of their work, or that they must rush off to supervise an experiment. Shannon's character, an Explorer named Wojdan, is exploring the halls of an alien structure alone when she finds a crystal pyramid as tall as she is. The pyramid's surface is covered with incomprehensible writing. Since her role allows her to research anything she finds when she explores a location before the rest of her team, she can begin studying the pyramid on her own. Shannon tells Jen, the GM, that Wojdan will compare the engraved writing to the symbols found elsewhere in the building to work out a translation. Shannon suggests that Wojdan's Culture skill might be appropriate, and Jen agrees.

Jen tells Shannon that the research faces Great (+4) opposition and will take a few days to complete. Shannon picks up the dice and rolls a Good (+3) result. Wojdan will complete the translation, but she'll encounter a major mishap in the meantime or after completing the project. Shannon makes a note that Wojdan is now RESEARCHING.

Since Wojdan is an Explorer, Jen decides the mishap will be a flock of carnivorous bat-like creatures attacking her while she's alone. Wojdan gets out her tri-wave pistol, ducks into a narrow alcove, and uses her wristcomp to call for help. The rest of her team comes running, and they drive off the bat-things. This doesn't affect the project's timeline, and Wojdan gets back to work.

The next day, while Wojdan is still RESEARCHING, some of the other PCs have an argument about whether to return to Earth. If the team leaves the mission site now, Wojdan won't be able to complete her translation. She joins in the argument, but because she's RESEARCHING, she's distracted by her translation project, and the other PCs can compel this against her.

Fortunately for Wojdan, the PCs agree not to leave the mission site, and after another day or two, her project is complete and she discovers the meaning of the message inscribed on the pyramid.

While a project is underway, the researching character may invoke aspects to hurry the project along. Each invocation improves the results of the original research action by two shifts, and adjusts the project's completion time accordingly. If the original research action produced a mishap, and improving the result converts the action to a success, this will not prevent the mishap from occurring.

Analyst, Experimenter, Explorer, and Visionary characters rely on scientific tools to perform research. If these characters do not have access to adequate tools, the GM may increase the opposition level of their research actions. Empath and Sleuth characters do not require tools for research.

Roles

Xenohistory Corps training gives you a unique form of insight, allowing you to examine evidence from a non-human perspective. In play, this is represented by the research role in your character's high concept. Your role determines the method your character uses to perform research.

The description of each role also includes suggestions for mishaps, along with opportunities to compel the role as part of the character's high concept.

The Analyst

When confronted with the confusion and chaos of the universe, you find solace in numbers. There isn't a riddle you can't solve with the correct equations or computer simulations.

Method: You gather data about your research subject and apply thorough mathematical analysis.

Mishaps: Your immersion in the world of pure data causes you to overlook an important practical detail. This mistake causes something unexpected and unfortunate to happen as soon as someone acts on the information you provided.

Compel: You pay more attention to your equations than to what's happening around you, so you might not notice that there's an urgent signal coming in on your wristcomp, or that something with huge fangs is looming over your shoulder.



The Empath

You are a member of the tiny fraction of the human population able to benefit from twenty-fourth-century techniques used to develop extrasensory perception. You can, sometimes, if you maintain perfect concentration, detect mental energies from minds other than your own. You experience these foreign thoughts as if they had originated in your own mind, which can be enlightening as well as disturbing.

Echoes of mental energy may remain in a location for millions or billions of years, which allows you to perceive the thoughts of the people who once lived on the deserted planets you explore. While RESEARCHING, you are performing a series of meditation sessions to draw ambient psychic energy into your mind.

Method: You open your mind to lingering memories and emotions in your environment. Use your Empathy skill to determine the outcome.

Mishaps: The memories you are channeling overwhelm you. A minor mishap may cause you to suffer only momentary delusions or hallucinations. If you suffer a major mishap, an alien memory or personality becomes fixed in your mind, severely affecting your behavior.

Compel: Even when you are not researching, you may involuntarily receive memories or emotions that drive you to seemingly irrational behavior.

THE POWER OF THE MIND

As an Empath, your ability to receive thoughts is an imprecise tool. Divining useful information from someone else's consciousness requires training and sound intuition. You do not receive automatic bonuses to interpersonal actions such as persuasion or interrogation, but your empathic abilities may affect how you perform those actions. For instance, while another character might judge a subject's mood by observing body language or speech patterns, you could read the qualities of the subject's mental energy.

If you want your character to gain bonuses or other effects from their psychic sensitivity, you'll represent this with stunts, like this one:

 I Saw That Coming: You gain +2 to Combat to defend against attacks from a sapient foe.

Also, an Empath can normally only comprehend the thoughts of beings with a human-like ability to perceive and reason. This will include the civilization-building inhabitants of the planets affected by the Sigma Event, but will not include animals unless the Empath has a stunt to allow this. GMs, you may increase the opposition to reading mental energy when the alien life-form in question is exceptionally strange or advanced.

FATE: WORLDS OF ADVENTURE

The Experimenter

You like to see how things work up close. Whether it's a mysterious machine or a bizarre life form, you can understand it more easily when you watch it respond to your presence and your actions.

Method: You operate, manipulate, disassemble, or otherwise interact with a research subject.

Mishap: Your experiment has catastrophic results.

Compel: You meddle with something any sane person would leave undisturbed.



The Explorer

Venturing into the unknown awakens your senses and your scientific instincts. You're never more alive than when you've set foot in a cave or a catacomb no human being has ever seen.

Method: You enter and study a new location before the rest of your team.

Mishap: You encounter danger in the area you're exploring.

Compel: If there's an ominous tunnel labeled with warnings in the local language, you need to find out what's at the end of it. If there's a deep, dark pit with the sound of something enormous stirring at the bottom of it, you need to abseil into it.



14

The Sleuth

In your experience, even the most brilliant minds in the galaxy can overlook what's right in front of them. By gathering the right facts from the right people and applying a little deductive reasoning, you can produce the answers that straightforward scientific procedure can't.

While you are RESEARCHING, you are not performing scientific experiments. Rather, you're considering what you've been told and comparing it to everything else you've seen and learned recently.

Method: You interview others and use their opinions and testimony to find the truth. You might collect theories from your teammates, or rumors from colonists, or incoherent ravings from the unfortunate scientist who was marooned on this planet ten years ago.

Mishap: You learn the truth the hard way, through ambush or accident or some similar consequence of your incessant snooping.

Compel: You ask questions about a topic you ought to avoid, and you suffer the consequences of prying into someone's affairs.



The Visionary

You understand that true scientific progress involves limitless speculation, leaps of intuition, and, sometimes, personal risk. To your peers, your theories may seem outlandish, and your methods alarming, but no one can deny that you get results.

Method: You provide an entertaining, scientific-sounding explanation for the outlandish device or experiment you're constructing to perform your research.

Mishap: Your defiance of the commonly accepted laws of physics causes disastrous side effects.

Compel: You can't pass up an opportunity to venture beyond the limits of known science, even if you can't control or predict the results.



16

Designing Discoveries

Opposition and Duration

GMs, you can choose the opposition to making discoveries by using the guidelines in *Fate Core* (page 133). It's a good idea to use a range of different opposition levels throughout a scenario. Weak opposition provides boosts and momentum, while strong opposition generates mishaps and encourages the use of fate points and teamwork.

Choosing project durations of a few hours or less allows the PCs to gather information quickly. Project durations of a day or longer provide opportunities for drama to develop while the PCs are conducting their experiments. Remember that generating shifts on success can reduce the project's duration, which means that spending fate points and rolling well may allow the PCs to make discoveries faster than you originally planned.

You can also use opposition and duration to emphasize the complexity of a task or the strangeness of an alien concept. If the PCs try to research a peculiar machine, you can assign a high opposition to show that it uses science far outside human understanding. If the PCs encounter a vast library, you can reinforce how large it is by announcing that it will take days to search through its documents.

If a project is difficult or time-consuming, the resulting discovery should be interesting or useful. Don't force the PCs to spend weeks of story time or all their fate points to learn something trivial.

Mishaps and Downtime

Remember that SPACE IS MYSTERIOUS AND DANGEROUS and the PCs should never be completely safe. When designing a discovery, consider how the research effort might put the PCs in harm's way. Adding hazards to the environment will make it easier to choose mishaps.

If you assign a duration of several days or longer to a research effort, consider what the PCs might do in the meantime. PCs who aren't already RESEARCHING might be able to reveal a few quicker discoveries. Other threats or complications might arise and demand attention. If you can't come up with anything else for the PCs to do while a project is in progress, you can fast-forward the story by announcing that you're going to skip ahead a few days.

Challenges

You may construct a complex discovery as a challenge by dividing it into a series of smaller discoveries. For example, discovering the purpose of an alien weathercontrol machine might require one PC to discover how to activate the machine while another PC discovers its effects on the local climate.

Team Efforts

Multiple PCs may participate in a single project and combine their skills for a teamwork bonus, if all of them participate in the project for the entire duration. Each participating PC must apply the research method appropriate for their own role. If a mishap occurs, the role and research method of the team member with the highest skill rank determines the form the mishap takes.

Alternately, the PCs can create advantages to help each other perform their research actions. For example, one PC might work to catalogue WELL-DOCUMENTED TISSUE SAMPLES to help a teammate research the biology of an unusual alien creature. The opposition to creating such an advantage is equal to the opposition to making the discovery itself. The PC performing the research can invoke these supporting aspects when rolling to begin the research project.

Other Actions

GMs, you may require the PCs to reveal a discovery before they can operate an alien device. For instance, they might need to use Tech to discover the scientific principles of an alien hovercraft before they can use Pilot to operate it.

You can allow the PCs to create advantages associated with alien artifacts, but you may require them to reveal a discovery first if the nature of the advantage would demand thorough understanding of the artifact. If they find a strange machine inside an alien spacecraft, they might easily determine that the machine is HIGHLY RADIOACTIVE. However, until they discover that the device is the ship's propulsion system, they might not be able to give it a POWER BOOST.

BRAINSTORMING IN SPACE

GMs, you can add in the brainstorm rules from the *Atomic Robo RPG* (page 132) if you'd like to let your players contribute to the stories and mysteries within the game.

18

THE SIGMA EVENT

When the first interstellar explorers reached Gliese 667 Cc and found the elaborate underground cities beneath its surface, humanity rejoiced at discovering proof that we were not alone in the universe. Although the inhabitants of the planet had gone extinct long ago, the fact that they had once lived seemed to be a clear sign that intelligent life must still thrive elsewhere in our galaxy.

As we searched world after world, we found other empty cities, other abandoned relics, other memorials to forgotten civilizations. At first, we dismissed this as pure chance, a quirk of cosmic scheduling that brought humanity to the stars during a brief period of galactic silence. This simple explanation failed when we found that many of these dead worlds did not bear the scars of global war, pandemic, or famine. The populations of these planets had vanished, leaving behind no corpses other than any ancestral remains they may have preserved due to their own customs.

The Sigma Event struck different worlds at different times. The most recent suspected occurrence was just over a century ago, and the oldest we know of happened fifty thousand years ago. On any given planet, evidence suggests the inhabitants had been going about their usual business and then, all at once, just disappeared. Explorers found vehicles abandoned in transit and tools dropped in the middle of use. Ancient recording devices that survived the passage of time and that might have observed this event have been of no help, as all such recordings show nothing but inexplicable random data for a period of fifteen minutes to a half-hour surrounding the event.

Hundreds of theories have arisen to explain these disappearances, from a galaxy-wide nanotech infestation to some sort of spontaneous spiritual transcendence. Though the Xenohistory Corps is still unable to provide an answer to this mystery, they have uncovered evidence that humans were not the first people in the galaxy to try to understand the Sigma Event.

The Sentinels

Out of the hundreds of formerly inhabited worlds found by human explorers, more than fifty were home to alien civilizations that rose to their height

within the past ten thousand years. Evidence suggests that many of these civilizations had learned faster-than-light travel and were in contact with one another, though none had ever reached our solar system. Despite their accomplishments, the Sigma Event struck them one at a time, leaving humanity as the sole inheritor of the galaxy.

On many of these recently occupied worlds, explorers have found the same triangular symbol (shown to the right).



Some structures marked with this symbol appear to be libraries, while others are laboratories or repositories for strange machinery. Many of these buildings contain diagrams and textual descriptions of a space-traveling object the inhabitants could not identify—a sphere adorned with thousands of long spikes, resembling a sea urchin. None of the facilities have photographic records of this object.

From other documentation found in these facilities, we know their inhabitants believed this object was responsible for the galaxy-wide extinctions we call the Sigma Event. The Xenohistory Corps refers to this alliance of interstellar researchers as the Sentinels, and refers to the object they were studying as Sigma.

Sentinel records explain why Earth has never detected the echoes of interstellar signals from these fallen worlds: they avoided sending long-range signals for fear of revealing themselves to Sigma. Since the planets holding Sentinel buildings are just as uninhabited as any other planet struck by the Sigma Event, it seems as if this precaution, and the other efforts of the Sentinels, were ultimately ineffective.

Still, the Corps hopes humanity can continue where the Sentinels left off, recommending that all travelers, satellites, telescopes, and colonists watch the skies for any glimpse of a spiked sphere moving between the stars.

The Truth?

GMs, you can devise any explanation you like for the Sigma Event and for the unidentified object the Sentinels were studying. Here are a few possibilities:

- Far off in the universe, alien beings of vast age and intelligence are trying to solve the mystery of consciousness and to identify the spark of intellect that distinguishes a lump of matter from a sapient life-form. They use the Sigma object to locate other intelligent beings and convert them from living matter to pure data, which they feed into their computers for intensive study.
- Sigma is a weapon created a billion years ago by a society who had concluded that all intelligent beings were inherently cruel and violent, and that true peace could only exist where there was no sapient life. These despairing philosophers programmed Sigma to find and destroy all intelligence in the universe, starting with themselves. Ever since then, their creation has patrolled faithfully through space, preserving the purity its creators sought.
- A malevolent being, able to disguise itself in any form, has come to our galaxy to replenish its life force by consuming entire civilizations. The Sigma object studied by the Sentinels is an intergalactic vessel whose crew, over the course of generations, has hunted this Devourer and searched for a way to stop it.

OUR PLACE IN THE GALAXY

The Desperate Past

In the twenty-second century, the costs of exploiting technological power for short-term gain finally came due. Ecological disasters, economic collapse, riots, famine, and warfare were the inevitable result. By the end of the Bloody Twenty-Second, as that dark century came to be known, half the world's population had died from starvation, violence, and disease.

When the fires of war burned themselves out, the survivors were self-sufficient, technologically proficient communities who had learned to apply twenty-thirdcentury science to establish a sustainable way of life. These isolated points of stability established a network of communication and cooperation. As this network grew more structured, it gave rise to the World Council, a body of several hundred representatives chosen by their regional communities for the purpose of sharing knowledge, resolving disagreements, and confronting common problems.

Extraterrestrial Operations

After gravity technology and metageometric science gave humanity access to the stars, the World Council established Extraterrestrial Operations, also known as X-Ops, to oversee activity beyond Earth's atmosphere. X-Ops establishes the laws and regulations that control the operation of off-world colonies, the practice of interstellar commerce, and the ownership of faster-than-light craft.

X-Ops manages four field agencies:

- The members of the Exploration and Survey Corps—informally known as the Scouts—travel to unexplored star systems and catalog the worlds they discover. All information collected by the Scouts is publicly available.
- Colonial Oversight dispatches liaisons to monitor conditions on offworld colonies and verify that both colonial sponsors and colonists obey X-Ops regulations. Oversight's reputation as a hive of nitpicking, arrogant bureaucrats is undeserved—for the most part.
- The Extraterrestrial Police Force enforces law and order beyond Earth's atmosphere. Although X-Pol officers are well trained in personal combat and ship-to-ship combat, they are primarily peace officers, not soldiers. They are authorized to use lethal force, but will avoid violence and the destruction of property whenever possible.
- The Xenohistory Corps investigates relics of prior intelligent life, collecting information that may improve the scientific understanding of our universe and its past inhabitants.

New Horizons

When faster-than-light travel arrived in 2238, the horror of the Bloody Twenty-Second was still a potent memory. Many people believed that humanity's time on Earth was running out, and that the only way to avoid extinction was to start again elsewhere. A few early colonization efforts failed tragically, but the rush to leave Earth never slackened. Eager would-be colonists raised money by any means possible so they could construct spacecraft and acquire the tools they needed to start a new life beneath a new sun.

Some colonists reach the stars with the help of sponsors who fund colonies as business investments. Colonial sponsors such as Choi-Singkateni Agriculture or Infinity Tourism identify worlds that might host lucrative industries and assemble teams of experts and volunteers to colonize them. Contracts between sponsors and colonists guarantee the sponsors a share of the profits. X-Ops reviews these contracts to make sure hopeful colonists aren't selling themselves into slavery.

By law, at least one Colonial Oversight liaison must be in residence on every off-world colony. Liaisons may request assistance from Earth when necessary, and may levy legal and financial penalties to punish offenses. On small colonies, however, the liaison may need to wait for the arrival of a trade or supply ship to send a message back to Earth, and this delay limits the practical use of the liaison's authority.

New Opportunities

Compared to the challenges of raising the money to purchase, outfit, and maintain a ship, the process of obtaining an operating license from X-Ops is trivial. X-Ops personnel refer to independent spacecraft owners as "indies."

The most reliable source of income for a spacecraft owner is transporting interplanetary freight. Smaller colonies need regular shipments of medicine and equipment to survive, while Earth is always hungry for exotic goods and raw materials from other planets.

Since there is no way to intercept a vessel in metageometric space, freighters are only vulnerable to piracy when departing or approaching a planet. Star systems in the Settled Zone are normally safe, but freighters traveling in the Frontier Zone must be wary and prepared to flee if a suspicious vessel approaches.

Indie explorers can reap greater rewards, but face greater risks. Colonial sponsors will pay well for the discovery of easy-to-colonize, resource-rich worlds, and unlocking the secrets of a vanished alien civilization can bring fame and fortune. But such success stories are rare, and indie explorers are far more likely to go broke exploring valueless hunks of rock or to perish on nameless planets due to equipment failure or poor judgment.

Technology

For centuries, optimists have predicted the advent of a technological singularity that would grant us the power to rebuild ourselves and the universe around us. This singularity has not arrived, but science has nevertheless transformed the human experience.

Computers: Quantum-bit computers can pack the calculating capability of a twenty-first-century data center into a centimeter-size chip. Despite this increase in raw power, the secret of creating true artificial consciousness remains elusive.

Transportation: Gravity-bending technology can alter the curvature of space, producing artificial gravity fields for propulsion and habitation. Gravity-slope tunnels carry passenger capsules across continents at hypersonic velocities, while spacecraft use gravity benders to ascend into orbit and travel between planets. Applying the principles of metageometry to gravity technology also allows us to traverse the higher dimensions of space and achieve faster-than-light travel.

Food: Organic printers can construct an endless variety of nutritious substances, altering texture and flavor to simulate real food items or to create new culinary experiences. Although printed food is both satisfying and inexpensive, an experienced palate can distinguish between naturally occurring food and synthetic fare, and produce from Earth farms or extraterrestrial orchards can demand a high price.

Communication: High-speed transmission of data is ubiquitous, allowing all inhabitants of Earth to communicate and exchange information instantly. Data transmissions are still limited to the speed of light, though, which means that faster-than-light spacecraft must carry interstellar communication from star system to star system.

Medicine: Twenty-fourth-century science has virtually eliminated chronic diseases and genetic defects, and panimmunity drugs can counteract almost all infections and viruses. Commonly available medical treatment can extend the human lifespan to two hundred years and can ensure that one's final years remain robust.

Money: The World Council has established the Universal Commerce Unit abbreviated as UCU, or just U—as the currency used by all government agencies. A single U can purchase a cheap cup of coffee; two Us will buy a small meal; two hundred Us will cover a respectable suit of professional clothes. The UCU is a purely electronic currency, and travelers who are beyond the reach of a computer network will carry money in a thumb-sized electronic wallet. These wallets are quantum-encrypted and keyed to the owner's biometric and genetic signature.

EQUIPMENT

Xenohistory Corps spacecraft are faster-than-light research stations, carrying all of the equipment a team might need to determine the age of an alien relic, reverse-engineer an unidentified machine, or cure an un-Earthly plague.

During the game, the players might come up with an idea for a tool not listed here, like a bottle of decontamination spray or a small sensor module they can leave behind to record information. GMs, if you think it's reasonable that a scientific team would carry such equipment, you can declare that they have it. If it's an unusual item, you might require a player to use Tech to build it, or to spend a fate point to declare the item as a story detail.



24

Personal Equipment

Equipment carried by every Corps researcher while in the field includes the following.

Uniforms

A field duty uniform is made of durable, comfortable fabric that dries quickly when wet, sheds heat in warm temperatures, and retains heat in colder environments. The jacket and cap both display the Xenohistory Corps insignia.

Scout uniforms and X-Pol uniforms are nearly identical to Xenohistory uniforms, except for their color and insignia. Xenohistory uniforms are blue; Scout uniforms are green; X-Pol uniforms are tan.

All Xenohistory researchers have at least one dress uniform, which is less durable and comfortable than a duty uniform, but much snappier.

Wristcomp

This cylindrical device snaps securely and comfortably onto the wrist, and fits over the sleeve of a pressure suit without constricting airflow. A wristcomp provides the following functions:

Wireless communication: Wristcomps can communicate with other wristcomps on the same planet and with the team's spacecraft anywhere within the same solar system. A wristcomp automatically broadcasts a "ping" once per minute that a receiver can use to locate the wearer. The wearer can switch off this automatic signal if desired.

Active and passive sensors: Wristcomps can perform many environmental analyses, including wide-spectrum energy detection, ultrasonic scanning, atmospheric and materials characterization, and gravity and acceleration measurement. These sensors have limited range, though, and can only analyze subjects within the same zone or an adjacent zone.

Remote access: A wristcomp can remotely access the computer banks of the team's ship. This doesn't permit remote piloting of the spacecraft, but does allow the user to consult the ship's data catalogs and to conduct complex mathematical operations.

Flashlight: A wristcomp can produce a beam of varying intensity, from a weak glow to a blinding glare.

Recording: A wristcomp can store a full month of recorded sensor readings, including audio and 360-degree video recordings.



Tri-Wave Pistol

This energy weapon is common among space travelers. It is recoilless, and at its lower power settings, it will not damage spacecraft hulls or other delicate equipment. It consists of a thick cylinder mounted over a trigger grip, and it weighs a kilogram and a half, balanced to ensure steady aim.

This is a small-scale weapon (page 34) and can hit targets up to two zones away. Characters attack with this weapon using the Combat skill. The attacker may choose the potency of the pistol's energy blast, from one of three levels:

Stun: This is a mild pulse, tuned to interfere with the target's nervous system and produce disorientation or brief loss of consciousness. Any consequences the target receives from this attack will disappear at the end of the scene. A stun blast produces no physical damage and does not affect targets without biological nervous systems.

Shock: This is a stronger pulse, which may leave lasting neurological damage, and may even kill its target. Consequences received from this attack recover normally. Like a stun blast, this attack does not affect targets without nervous systems.

Beam: At this setting, the pistol emits a narrow beam that can burn through solid objects. This is a standard physical attack. Characters may also use this setting for utility purposes, such as cutting through barriers.

Portable Tools

Xenohistory researchers normally carry two small toolkits, each in its own belt pouch. The general-purpose toolkit contains small hand tools, useful for both scientific analysis and light technical work. The medical kit contains artificial spray skin, panimmunity drugs, and other first-aid supplies.

FATE: WORLDS OF ADVENTURE



Heavy Equipment

A Xenohistory Corps ship will also carry a complement of less portable equipment, including:

- Heavy-duty technical tools such as laser cutters and pry bars, along with a versatile collection of electronics and computer maintenance tools.
- A large medical kit, allowing for intensive procedures such as field surgery and detailed medical diagnosis.
- Excavation tools, including a hypersonic rock pulverizer, as well as simple shovels, picks, and trowels.
- Camping equipment and survival gear, including climbing tools, portable cooking equipment, and two pressurizable and temperature-controlled four-person tents.
- A small six-passenger flier with a gravity-bender engine. The flier can travel up to two hundred kilometers per hour, and can travel through atmosphere and vacuum equally well. The crew can disassemble the flier for compact storage during interstellar flight, and reassemble the flier within a half-hour when needed.
- Radiation-shielded pressure suits, with built-in zero-gravity maneuver jets. Each suit can hold enough oxygen and power to sustain a crew member for forty-eight hours.

Spacecraft

Structure

Like most human spacecraft, a Xenohistory Corps vessel is spherical, designed to fill the volume of the ship's artificial gravity field. Corps vessels are twelve meters in diameter and have three decks, with crew quarters on the upper deck, engineering and command systems on the middle deck, and science facilities and cargo on the lower deck. These ships can carry eight crew members comfortably, though most field research teams are smaller than this. Only a single pilot is necessary to operate the vessel.



Gravity Bender

The ship's gravity bender alters the curvature of nearby space, producing a gravity field within and around the vessel. Adjustments to the field can accelerate the ship in any direction, while simultaneously providing Earth-normal gravity within the ship. The direction of internal gravity is independent of the ship's direction of acceleration, and the pilot can flip and spin the ship without anyone inside feeling the slightest motion.

Metageometric Matrix

This fractal array of high-energy fields changes the effect of the ship's gravity bender, causing it to exert a gravitational influence that extends beyond the three dimensions of normal space. With the matrix active, the gravity bender can pull the ship through an N-dimensional path that serves as a cosmic shortcut, delivering the ship to a distant point in conventional space far faster than the speed of light.

Human spacecraft can cover distances of up to five hundred light-years within a single Earth day. A traveler from Earth could reach Alpha Centauri in less than fifteen minutes, and could cross the galaxy in six months. Curvature of space produced by massive objects interferes with the matrix, and an external gravity field stronger than one percent of Earth's surface gravity will completely prevent the matrix from operating. As such, vessels close to planets and moons can travel only through conventional space. In addition, while the matrix is operating, the gravity bender cannot produce internal gravity for the ship, leaving the crew in free fall.

Subnuclear Beam

The ship's subnuclear beam projector can instantly convert large solid objects into insubstantial clouds of atomic particles. Few materials outside of a neutron star can resist the beam. Though it is obviously useful as a weapon, Corps personnel can also use it to dig tunnels and remove barriers.

PCs can attack with the subnuclear beam by using Combat.

Medical Station

The ship's medical station is mostly automated. Acting on instructions from the crew, it can perform basic tasks such as checking vital signs and administering medication, and it can provide assistance during surgical procedures. Using the station gives a character +2 to Nature when providing medical diagnoses and treatment, and when assisting with recovery of physical consequences.

Comm Station

The comm station can make contact with spacecraft, wristcomps, or other communication systems within the same star system. Comm signals travel at the speed of light, which produces virtually no delay when communicating with someone on the planet that the ship is orbiting, but may produce a delay of minutes or hours when communicating with receivers further away in the star system.

The ship's transmitter is powerful enough to broadcast a signal across interstellar space, but since this signal would travel at light speed, it would take years to reach its destination. The only quick way to bring a message to another star system is to travel there through metageometric space.

Life Support

The ship's recycling systems provide fresh air and water throughout a long-term mission in deep space. A food printer in the mess area converts compressed nutrient blocks into meals.

SUPPLIES

Instead of carefully tracking the team's use of food and oxygen, you can assume the PCs will have enough resources to accomplish their mission. The ship will carry enough supplies to permit a thorough research effort, including travel time to the mission site and back. Smaller equipment, such as environment suits or the ship's flier, can sustain life support for a day or so. Compel the SPACE IS MYSTERIOUS AND DANGEROUS setting aspect when it would be dramatically appropriate for the team to run low on supplies.

The ship's main airlock is on its lower deck, though a smaller airlock is available on the upper deck as a backup. The backup airlock contains decontamination systems to neutralize hostile radiation and microorganisms carried onboard by returning crew members.

Sensors

As a scientific vessel, a Xenohistory Corps craft carries a sophisticated array of sensing and recording devices. These sensors can provide the following information about objects on a planet the ship is orbiting:

- Optics can produce images detailed enough to allow crew members in orbit to read a book on the planet's surface, even if nothing but distant starlight illuminates the pages. These optics can also produce images using infrared and ultraviolet light.
- Ground-penetrating scanners can identify the approximate size and outline of subterranean spaces.
- Electromagnetic sensors can pinpoint energy sources as small as a wristcomp or tri-wave pistol.

At a distance of one astronomical unit—the distance from the Earth to our sun—the ship's sensors can determine the following:

- Optics can produce images with sufficient detail to read text with letters a half-meter high.
- Spectrometers and mass calculators can produce detailed information about a planet's environmental conditions, including the composition of its atmosphere and oceans, strength of its surface gravity, and both surface and atmospheric temperature measurements. This information is sufficient for the crew to determine whether a planet can support human life, or whether visitors would require environment suits or other protection.
- The ship can detect power sources strong enough to sustain spacecraft, cities, or factories.

The ship's sensors are not infallible, and intense radiation or energy pulses can blind them temporarily. Basic camouflage can fool a ship's optics, while dense materials or electromagnetic jamming can defeat other sensors.

The ship will continuously record all sensor readings of the nearby environment unless the team turns off the recording feature. The ship can automatically raise an alert when certain conditions occur, but the team must define those conditions. For example, the team might set the sensors to raise an alert if a specific alien building begins to emit energy signatures, or if the local radiation rises to levels that would be harmful for unprotected humans.

Computer Banks

The ship's computers can perform all calculations necessary for interstellar navigation and can facilitate mathematical analysis of research data. The memory banks store copies of X-Ops databases, including colony catalogs, X-Ops personnel rosters, and research information collected by the Exploration and Survey Corps and the Xenohistory Corps.

The computer can understand verbal instructions and can provide verbal responses to commands or queries. Keyboards and monitors are available throughout the ship for complex operations.

The ship's computer cannot make decisions on its own, and has only limited capability to control the ship. Upon request, it can move the ship into orbit around the nearest planet or land on the nearest planetary surface. It can also use the metageometric matrix to return to Earth. The autopilot is intelligent enough to move away from a planet's gravity well before activating the matrix.



Quark Reactor

The ship's power system strips elementary particles from a hypercompressed hydrogen pellet and annihilates them in exchange for energy. This reaction is impossible unless the magnetic containment chamber is perfectly intact, and a breach will halt the reaction instantaneously and harmlessly.

32
Ship's Robot

The Xenohistory Corps provides every team with a robot to provide assistance with routine tasks so the human team members can focus on research. Corps robots are standard AA9 models, humanoid in outline, with cylindrical torsos attached to skeletal metal limbs. Atop the torso is a circular display the robot can use to present textual or graphical information.

AA9 robots are not conscious or alive in any sense, though they are capable of simulating pre-programmed personality characteristics. They can carry out complex tasks, but they will not undertake any action without being ordered. A Corps robot will normally only accept orders from a member of the team it is assigned to, though its team may reprogram it to accept orders from other individuals.

Players, you may assign skills and aspects to your ship's robot as if it were a Good NPC. The robot's purpose in play is to handle simple, boring tasks so that the PCs can undertake more interesting actions. The PCs might instruct their robot to guard their vessel, or to inventory a huge chamber full of artifacts, or to take the ship's flier to collect supplies from a nearby colony.





Scale and Stress

Weapons and targets in *Ghost Planets* are either small-scale or large-scale. Humans and personal weapons are small; spacecraft, spacecraft weapons, and many other vehicles are large. Small-scale weapons cannot harm large-scale targets, and a successful attack from a large-scale weapon will immediately take out a small-scale target.

Remember that a taken out character isn't necessarily dead. A successful attack from a large-scale weapon might not blast the target to bits—it could be a near miss whose shock wave knocks the target senseless.

A spacecraft has no stress boxes, and must take consequences to absorb hits. A mild consequence represents structural damage that will require repair, but will not impair the ship's performance.

A moderate or severe consequence must represent the failure of one of the ship's systems, such as SENSORS BURNED OUT OF QUARK REACTOR OFFLINE.

A moderate consequence will cause one of the following ship's systems to fail:

- Medical Station
- Computer Banks
- Sensors
- Comm Station
- Subnuclear Beam

A severe consequence will cause one of the following systems to fail:

- Life Support
- Gravity Bender
- Metageometric Matrix
- Quark Reactor

The players may choose which system fails when the ship takes a consequence.

PCs can use Tech to recover their ship's consequences, according to the standard rules in *Fate Core* (page 164).

If the ship is taken out, all of its systems fail, and the vessel becomes an inert hunk of metal. At this point, the damage to the ship is too extensive to repair, and the ship is useful only as scrap and spare parts.

FARTHER STARS

Galactic Zones

Space travelers divide human colonies into two zones to indicate the likelihood that a given colony is stable and well supplied:

- The Settled Zone contains Earth itself and her most stable and successful colonies. Stars in this zone are within a month's travel from Earth.
- The Frontier Zone contains a mix of new colonies, unsettled worlds, and unexplored territory. Xenohistory teams and the Scouts focus most of their efforts here. The most distant stars in this zone are two months from Earth.

Some scientific expeditions venture beyond the Frontier Zone, and some unregistered colonies exist far beyond the protective oversight of X-Ops, but apart from those faint sparks of human presence, the rest of the galaxy remains unexplored territory.

Points of Interest

The galactic map on page 37 identifies a few locations that may be of interest to Xenohistory researchers:

- 1. Earth's global temperatures and seas have risen, and the landscape bears atomic scars from a few thermonuclear detonations during the Bloody Twenty-Second, but the collapse of the old global industries has given the planet time to heal. Wild meadows bloom where there were once only acres of artificially sustained agribusiness. Grass and trees have begun to conquer the concrete blight of urban sprawl. Modern communities live modestly and sustainably, working in harmony with nature.
- 2. Dalma was home to humanity's first colony under a different sun, and serves as a living mission statement of a new approach to prosperity and industry. Though over a million souls live on Dalma, the blue-green skies remain clean, while the sparkling rivers remain pure. The planet's natural resources are unremarkable, but the colony remains prosperous due to its popularity as a tourist destination.
- **3.** The colonists of Adak believe the tall, copper-colored obelisks scattered across the landscape are spiritual signposts, constructed to guide pilgrims to a new, sublime state of existence. The main settlement sits at the foot of the largest obelisk, a two-kilometer-tall pillar constantly surrounded by the hopeful and the desperate. The Xenohistory Corps believes these objects are merely inert statues, but this has not dimmed the zeal of Adak's pilgrims.

- **4.** The colony at Gilmour has held a reputation for corrupt politics and criminal enterprises since its foundation. The oppressive practices of the original colonial sponsors drove the colonists into armed revolt, and although X-Ops has helped to dismantle and rebuild the settlement's political structure, the population remains hostile and distrustful of its leaders. Criminal organizations thrive in the colony's lawless back alleys, while a new clique of savvy bureaucrats has found ways to exploit the colony's wealth without drawing the attention of X-Ops.
- 5. Orbiting the star V4998 Sagittarii is the Needle, a cylinder two million kilometers long and ten thousand kilometers wide. Xenohistory teams have barely begun to explore this structure, but initial evidence suggests that the machinery it contains are vast batteries of automated factories, abandoned before they could be completed. The latest team to return from the Needle has advanced the theory that the cylinder may have been intended as a single component of a larger apparatus.
- **6.** The planet Juani became home to humanity's first breakaway colony when the settlers announced that they would no longer permit off-planet visitors, including X-Ops personnel, without explicit invitation from colonial leaders. The colony has only ten thousand inhabitants, and could not resist a determined invasion, but they are armed well enough to ensure that such an invasion would be bloody and destructive. X-Ops surveillance vessels have reported that the colony appears peaceful and pastoral, despite the colonists' defiance of external authority, and X-Ops has found no justification to violate the colony's self-imposed isolation.
- 7. The native civilizations of Requiem perished during a global war three million years ago. In one of the planet's shattered cities sits a unique artifact: a two-meter tall metal ovoid the Xenohistory Corps refers to as the Egg. The Egg remains completely inert until a living being asks it a question, in any language. In response, the surface of the Egg distorts, forming a complex symbol. The symbol is different for every question, and no symbol has appeared more than once.
- 8. One of Earth's earliest exploration vessels, the *Arowana*, never returned from its expedition to Tau Ceti. Twenty years later, a Scout vessel found the *Arowana*, abandoned in deep space thirty-five thousand light-years from its planned destination. The ship's computer logs were blank, and the only clue to the crew's disappearance was a handwritten note stuck to a control monitor:

Where we go now, none may follow. Children of Earth: forget us. To our families: forgive us.

36



MISSIONS

Objectives

The Xenohistory Corps sorts through reports of alien artifacts—provided primarily by the Scouts, but sometimes by colonists or indies—and dispatches research teams to investigate. The Corps has less than a hundred field researchers to divide among a backlog of several hundred alien worlds, so it may be months or years before the Corps can send a team to follow up on a report.

GMs, when you give your players a mission, be sure to provide them with specific mission objectives, as assigned by the Corps. It's important to present objectives that allow the players to identify when their mission is complete. Any alien world will probably have enough research material available to keep a Xenohistory team busy for years, and since the characters can't pick up a phone and call home for instructions, their objectives must clearly explain when they're allowed to pack up and leave.

The parameters of a research mission may vary from site to site, but will normally include the following:

- 1. A Xenohistory team's first task is to confirm whether intelligent life still exists at the mission site. This is almost entirely a formality, since Corps explorers have never encountered intelligent nonhuman life, and if an alien civilization were still thriving on a planet, it's likely that the Scouts would have made this discovery before any other visitors arrived. Nevertheless, researchers should investigate any evidence that might lead to humanity's first contact with the children of another star.
- **2.** The team's next task is to search for Sentinel facilities. These will be the places most likely to have information relating to the Sigma Event.
- **3.** If the planet's inhabitants were not the victims of the Sigma Event, the team should attempt to identify the planet's Omega Event. Information about the extinction of an alien species, whatever the cause, is vital for the survival of humanity.
- 4. If the Sigma Event was responsible, the team should look for information that might help explain the Sigma Event. Did the aliens have any advance warning? What caused them to suddenly vanish? Where did they go? So far, no Xenohistory team has made progress toward answering these questions, and finding even a single clue would be a major breakthrough.
- 5. The team should investigate any anomalies or items of scientific interest at the mission site. Technology that surpasses human science is valuable, even if it does not directly defend against the Sigma Event. The team should also document hazards that might endanger future visitors.
- **6.** After the team completes the above objectives, the site becomes a lower-priority item. Unless instructed otherwise, the research team should leave the site at this point and prepare a complete report of its findings. This report should contain the team's recommendations for further action and future research.

FATE: WORLDS OF ADVENTURE

The Corps requires research teams to use their ship's sensors and wristcomps to make a complete audiovisual recording of their activities and findings. Researchers should record the position and condition of all artifacts before disturbing them, to document the state of the exploration site before human investigation.

Leadership

Every Xenohistory team must choose one of its members to act as lead researcher. According to the team's preferences, this role may rotate between team members from mission to mission, or may remain attached to a single researcher. The lead researcher coordinates the team's efforts, acts as mediator and tie-breaker in case of disagreements, and serves as the team's spokesperson. This is not a formal command position, and it exists only as a mechanism to focus and structure the team's decisions.

Emergency Protocols

The Corps permits or requires its researchers to deviate from their mission objectives if any of the following situations arise:

- If a team member develops a life-threatening medical condition that the team cannot address in the field, the team must immediately return the patient to Earth or to the nearest colony with the necessary medical facilities. It is permissible to leave some personnel behind at the mission site to continue research.
- If colonists, indies, or X-Ops personnel require help that only the Xenohistory team is in position to provide, the team must provide whatever assistance it can. Researchers may decline requests for help with trivial issues. A Xenohistory team could reasonably interrupt its work to help colonists repair their water purifiers, but not to help repair their virtual-reality game console.
- X-Pol officers in the field have the authority to issue instructions to X-Ops personnel. An officer operating alone might ask for assistance locating a dangerous criminal, or an X-Pol team investigating a crime might need the advice of a Xenohistory team if some aspect of the crime involves alien artifacts. Most X-Pol officers will phrase this as a request rather than an order, and will avoid interfering with the duties of other X-Ops agents unless absolutely necessary.
- If Xenohistory researchers discover anyone violating the law, they have a responsibility to notify X-Ops. Giving the information to an X-Pol officer or a Colonial Oversight liaison is sufficient. Researchers may exercise their own discretion when deciding how quickly to deliver this information, based on the severity of the crime. The Corps does not expect researchers to enforce the law on their own, unless explicitly instructed to by an X-Pol officer.

THE DOOMSDAY CLOCK

The Doomsday Clock is a complete adventure you can use for a single-scenario game of *Ghost Planets* or as part of a longer campaign.

Mission Objectives

The Xenohistory Corps has instructed the PCs to investigate a Sentinel facility on the planet Pākurakura. The Scouts discovered the facility two years ago, but competing priorities prevented Xenohistory from sending any researchers to investigate until now. Because the shape and arrangement of the buildings makes them resemble an old-fashioned analog timepiece when viewed from the air, the Scouts referred to the facility as the Clock.

The Corps has given the PCs these objectives:

- Gain access to the Sentinel facility buildings, preferably using nondestructive methods.
- Attempt to determine the facility's purpose. The PCs may terminate this
 effort at their discretion due to lack of evidence. After sixty days on-site,
 the team must either return to Earth or send at least one team member
 back to give a status report.
- Before leaving the site, collect artifacts to bring back to Earth for further study.

Pākurakura

Pākurakura is in the Frontier Zone, 17,000 light-years from Earth. The journey to the mission site will take five weeks.

Pākurakura is a reddish world whose seas are crimson with algae and whose plains are overgrown with rust-colored fuzz. Its atmosphere is habitable to humans, though the planet as a whole is warmer and more arid than Earth. Pākurakura is large, and its surface gravity is slightly stronger than Earth normal.

A day-night cycle on Pākurakura lasts thirty hours. When this chapter describes time periods in days, these are local planetary days.

Documents, works of art, and other artifacts found by the survey team show that the planet's inhabitants appeared spider-like, with round torsos and long slender legs, protected by a blue-black carapace.

Pākurakura's population had spread across its many continents, and may have numbered in the billions. The brief exploration conducted by the Scouts revealed the usual evidence of the Sigma Event. Seven thousand years ago, all activity on the planet ceased suddenly, without chaos or disaster, as if the inhabitants had quietly vanished.



Arrival

The Sentinel facility is in the middle of a vast red desert, far from any water or former alien cities. Periodic blasts of high winds cover the area with clouds of choking sand. The gusts carry off as much sand as they leave behind, and may expose some structures while burying others.

The complex consists of thirteen buildings, all made of the same dull purple material. The central building is a wide, flat dome, 150 meters across and thirty meters high at its summit. The other twelve buildings are rectangular, two hundred meters long, twenty meters wide, and ten meters high. These buildings are arranged in a circle around the dome like the hour marks of a clock. The buildings are not connected. The featureless exterior walls of the rectangular buildings slope inward, so that their bases are wider than their summits.

Just west of the complex, three small decaying aircraft sit half-buried in the sand. The craft are less than twenty meters long, and each might have been able to transport a dozen of the planet's inhabitants. When operational, the craft would have been unable to leave the planet's atmosphere. In their current decrepit state, they are little more than piles of scrap.

The PCs will arrive at the site in the early afternoon. As they approach the Clock, they will encounter the unexpected sight of another human vessel near the facility.

The Indies

The indie ship is slightly smaller than the Xenohistory craft, large enough for a crew of four with some space left for cargo. Like all human ships, it transmits a standard identification beacon, and the PCs can look up the ship's identification code in their X-Ops database. This will reveal that the ship is a private spacecraft called the *Little Winds*, constructed ten years ago and registered to Lucimara Cielo and Aziz Hariri. The database has no information on Cielo and Hariri. They are not X-Ops personnel or employees of any colonial sponsor, and they have no criminal records.

Making Contact

If the PCs use their comm station to contact the indie spacecraft, there will be a delay of half a minute before Cielo responds. The audiovisual communication link will show the image of a woman with an orange mohawk and the rugged, deeply tanned skin of someone who spends much of her time in harsh climates. A twenty-first-century observer would guess she is in her forties, which means that, due to twenty-fourth-century medical technology, she might be a hundred years old.

She will introduce herself and will claim that she and her partner are independent scientific researchers. Believing that the Xenohistory Corps was not planning to study Pākurakura for several years yet, Cielo and Hariri hoped to make their own contributions to science by studying the planet themselves.

Two days ago, they noticed the Clock during an aerial survey, and they decided to investigate. They performed a visual inspection of the site, taking care not to disturb anything. The only obstacle they encountered was a series of doors inside the dome structure that prevented access to a large central chamber. They found no way to open these doors.

On the night before the Xenohistory team arrived, Cielo awoke to the sound of a violent sandstorm, and to the sound of the ship's loading ramp lowering. She dressed quickly and looked for Hariri, but he was no longer in the ship. She cycled through the airlock and stepped out onto the loading ramp, but she couldn't see anything except whirling clouds of sand.

After a few minutes, the sandstorm abruptly halted. She went out to look for Hariri, but couldn't find him. The storm had erased his tracks, and he didn't answer when she tried to contact his wristcomp. She also found the ship's sensors could no longer detect his wristcomp's tracking beacon.

She's spent the day searching the area on foot, but found no sign of her partner. She will claim that when the Xenohistory team arrived, she had returned to her ship just in time to hear the incoming signal on her comm station.

But Actually...

Much of Cielo's story is true, but neither she nor Aziz is a researcher. They make a living by scavenging alien artifacts, smuggling them back to Earth, and selling them on the black market. They have already removed several crates worth of artifacts from the site, and these crates are in the hold of the *Little Winds*.

When she realized a Xenohistory ship was approaching, she erased all wristcomp and ship sensor recordings that showed herself and Hariri removing artifacts from the site. The remaining recordings will back up her claims that she and Hariri had explored the site, though careful inspection will reveal the gaps left by Cielo's deletions.

When the PCs gain access to the dome's central chamber, Cielo will want to follow them inside to find more artifacts she can sell. Since it's illegal for private citizens to bring alien artifacts back to Earth without review and approval by X-Ops, Cielo will conceal her actual profession from the PCs as long as possible. If they discover what she's doing and threaten to confiscate her artifacts or report her to X-Ops, she'll promise them a share of her profits in exchange for their cooperation. She has no intention of paying the PCs, but she'll strike a bargain now and break it later if it will help her bring artifacts back to Earth.



Discoveries

Sandstorms

Research Subject: Local climate patterns

Opposition: Fair (+2)

Discovery: At the time the facility was constructed, this area was just as desolate and inhospitable as it is now.

Project Duration: A few hours

The sandstorms that roar through the area several times a day are powerful enough to knock someone flat and bury them in seconds. Someone closely monitoring the ship's sensors can detect an approaching storm a minute or two before it arrives, and can warn the rest of the team to find shelter. Making this discovery allows the team to predict a storm up to an hour ahead of time.

Airstrips

Research Subject: Stabilized surfaces under the sand to the west of the Clock **Opposition:** Average (+1)

Discovery: The airstrips under the sand are extensive enough to handle the traffic of a major metropolis.

Project Duration: One day

If the PCs examine the aircraft to the west of the Clock, they'll find that the vehicles are parked at the edge of a network of long stabilized surfaces buried under the sand. These are airstrips, and mapping them will show that they are intended for vehicles larger than the aircraft abandoned here, and in far greater numbers.



44

Cubots

Research Subject: Black cubes found buried in the sand

Opposition: Good (+3) if the PCs are willing to cut one open, Fantastic (+6) otherwise

Discovery: These automated defense robots can levitate and sense gravity patterns, and are armed with beam weapons.

Project Duration: One day

As the PCs explore the Clock, have the players roll to overcome with Notice against Good (+3) opposition. Any character who succeeds will find a black cube, twenty centimeters wide and weighing about five kilograms, buried in the sand. A dedicated search, using wristcomp scans, will turn up a dozen of these cubes under the sand at various points around the facility.

Cutting open a cube will allow a researcher to examine its components, but will render the cube permanently inoperative. It's possible to study a cube without opening it, by using detailed ultrasonic and electromagnetic scans, but this method is more challenging.

A character who researches the cubes will discover they are small robots. Their interior components consist of:

- A computer guidance system composed of arrays of tightly packed crystal plates, each plate imprinted with intricate magnetic patterns
- A laser weapon powerful enough to kill a human being
- A microwave communications transmitter and receiver
- · Miniature gravity manipulators, in the form of rings of braided metal

The gravity manipulators can tap into the planet's gravity field to provide the cubots with an unlimited power source. The manipulators also allow the cubots to levitate and to detect nearby objects by measuring the gravity patterns created by their mass.

The cubots are automated sentries, capable of carrying out patrol and combat instructions without external guidance. When the PCs first land on Pākurakura, the cubots are inactive, and will not react to handling or experimentation.

After the PCs discover how the cubots operate, they can activate and control the cubots. A character can impose a MANUAL CONTROL aspect on a cubot by creating an advantage with Tech against Fair (+2) opposition. A cubot with this aspect can accept microwave command signals transmitted by wristcomps or by the ship's comm suite. Cubots under manual control require constant guidance, and each character may only operate one cubot at a time. During a conflict, commanding a cubot to act during an exchange spends the controlling character's action.



Dormitories

Research Subject: Long racks of three-meter-wide shallow bowls Opposition: Fair (+2) Discovery: These are bunk beds for hundreds of residents. Project Duration: Several hours

The featureless dark purple walls of the Sentinel buildings remain unscratched despite the grinding, shifting sand that has assaulted them for three quarters of a billion years. The material of the walls is strong enough to resist tri-wave pistols at their highest setting.

The only entrances to each of the rectangular buildings are doors at both of their narrow ends. The doors are five meters high and wide, narrower at the top than at the bottom. Alongside each door, at a height of a meter and a half, is a round metal plate five centimeters across. Touching the plate will open the door, or close it once it is open.

Circular controls in the floors near the doorways will activate the interior lights. These produce a dim orange illumination, drawing power from perpetual batteries built into the buildings' structures.

Each of the rectangular buildings holds several long racks, stretching from one end of the building to the other. These racks are three levels high, and support a collection of flat bowls, each three meters across. Soft, durable material lines the concave upper surface of the bowls. Each three-level rack holds a hundred and twenty bowls, and each building holds two racks.

After researching the bowls and comparing them to Scout reports about furniture found in the planet's cities, the PCs will discover that these are bunk beds and that a few small enclosures in the corners of these buildings are sanitary facilities. This being the case, the entire Clock facility was designed to support close to three thousand residents.

Dome

EXTERIOR

A five-meter-wide ramp leads up and over the dome to a ten-meter-wide circular platform at the dome's summit. Several sigils are carved into the platform, and if the PCs discover how to translate the local language, they can identify these marks as symbols of caution.

Around the exterior of the dome are eight doors, each three meters by three meters. Each is engraved with the Sentinel triangle symbol, and each has a metal access plate, similar to the doors of the dormitory buildings.

As in the dormitories, controls in the floors will activate dim orange interior lights.

OUTER RINGS

Research Subject: Glyphs found on computer consoles and other equipment throughout the dome

Opposition: Good (+3)

Discovery: Researching these glyphs will allow the PCs to translate the written language of Pākurakura.

Project Duration: A few days

Research Subject: Glitches exhibited by the computer consoles

Opposition: Superb (+5)

Discovery: The glitches were caused by intentional software sabotage.

Project Duration: One day

Note: PCs must discover how to translate the language of Pākurakura before they can perform this research.

Research Subject: Short-range microwave signal emitted by the metal plates near the doors to the central chamber

Opposition: Great (+4)

Discovery: Transmitting the correct mathematical signal to a plate will open the nearby door.

Project Duration: One day

A twenty-meter-wide ring around the outer edge of the dome contains an assortment of rooms of various sizes. Some of these hold racks of equipment components, some appear to be residences, and others hold low inclined tables that appear to be computer consoles. Tapping circular buttons on these tables causes their surfaces to light up with complicated charts or paragraphs of the characters that form the written language of Pākurakura.

Glitches interfere with operation of the computer consoles. Visual distortion may briefly scramble the displays, or the consoles may refuse to respond to input or may shut down abruptly. The PCs won't be able to repair these glitches until they discover how to translate the local language and can understand the error messages the consoles display. Once the PCs discover how to repair the computer glitches, it will become apparent that these faults are not random, but deliberate sabotage. Not long before Sigma claimed the planet's population, someone introduced malicious software into the facility's computers to cripple them. Repairing the glitches will only take an hour, and will leave the PCs in control of the dome's equipment. This will also prevent the automatic nightly activation of the translocator.

A ten-meter-wide circular corridor runs around the dome just inside the ring of residences and work rooms. The inner wall of this corridor is as thick as the dome's exterior walls. There are twenty doors leading through this wall, each secured by access plates. These plates do not respond when touched.

Wristcomps will show that these door plates are transmitting a complicated short-range microwave signal. A PC who researches these plates will discover that the signal is a constantly changing series of mathematical codes. This discovery will allow the PCs to reprogram their wristcomps so they can decrypt the signals and transmit the correct access code in response. Transmitting the correct code can open or close a nearby door. This code can also close and lock any other door in the Clock.



THE TRANSLOCATOR

Research Subject: The machine in the center of the dome

Opposition: Fantastic (+6)

Discovery: The machine is a translocator. It can open a metageometric tunnel through space, allowing for instantaneous travel to another star system.

Project Duration: Several days

The remaining interior space is a ninety-meter-wide circle in the center of the dome. The walls of this chamber are impenetrable to sensor equipment when the doors to the encircling corridor are closed. Even when the machinery in the chamber is operating, any PCs outside will be unable to detect energy signatures or other emissions from within.

The most obvious component of the machinery within the chamber is a metal geodesic sphere, thirty meters high, floating five meters above the ground in the middle of the chamber. Wristcomps won't reveal what's holding it suspended in the air or what's inside, but its surface is vibrating and producing a faint whine at the upper limits of human hearing.

Arranged in a fifty-meter-wide circle around the sphere are rings of braided metal strands, similar to those in the cubots, but larger. Each ring is three meters wide and a meter thick. They are mounted in brackets on the floor, tilted slightly so they face directly toward the geodesic sphere hovering above them.

Around the chamber wall are several computer consoles and fifty tall enclosures containing crystal panels similar to those found in the cubots.

Discovering the translocator's purpose also awards the PCs with the discovery described in the "*Mysterious Vanishings*" section (page 52).

After researching the machine, the PCs will discover that it focuses the planet's own gravity waves to produce a metageometric tunnel through space, between Pākurakura and a colonized planet in the Settled Zone called Bagatao. Bagatao is one week away from Earth at human spacecraft speed, and four weeks away from Pākurakura. An object entering the tunnel at the Pākurakura end will instantly emerge from the Bagatao end. This accomplishment is far beyond twenty-fourth-century human science, which cannot open a tunnel through metageometric space or create metageometric effects within a planet's gravity field.

When Cielo and Hariri landed near the Clock facility, their presence awakened the computers inside the dome. Due to the software glitches, the computers reacted by activating the translocator every night, and their damaged programming caused the precise locations of the tunnel entrances to vary slightly. When Aziz Hariri left his ship to investigate the gravitational disturbances the ship's sensors were detecting, the tunnel opened directly in front of him, and he stumbled through.

Sigma

Research Subject: Information in computer databases inside the dome **Opposition:** Fair (+2)

Discovery: The world government of Pākurakura constructed the translocator to save its population from Sigma. A strong faction of insurgents was suspicious of the government's every action.

Project Duration: One day

Note: The PCs must discover how to repair the computer glitches before they can perform this research.

After the PCs discover how to translate the language of Pākurakura and how to correct the glitches in the dome's computers, they can dig through the facility's databases to determine its history. They will discover that the planet's government was aware of Sigma's threat and was collaborating with other worlds to design a planetary evacuation system.

Using their expertise in gravity manipulation, the scientists of Pākurakura constructed the translocator. If Sigma appeared, aircraft would transport the planet's inhabitants to the Clock, and the translocator tunnel would carry the refugees away from their doomed world. The dormitories were intended as temporary housing to help manage the flow of refugees through the facility.

At the same time, the planet's government was facing threats from insurgents who believed the planet's leaders were corrupt tyrants. The insurgents had been committing acts of sabotage and armed rebellion for several years. Their last and most potent attack involved widespread software sabotage. The insurgents injected malicious programming into a variety of government facilities, set up to activate at a specific time.

Before the malicious software could activate, Sigma arrived. The Clock's architects assumed the people of Pākurakura would have several days to react to Sigma's appearance. Instead, they had only minutes. The planet's population vanished before anyone could even start the translocator.

The appearance of Sigma, and the disappearance of the population, is not recorded in the computer databases due to the usual brief sensor scrambling that accompanies the Sigma Event.

Days after Sigma arrived, the sabotage programs created by the insurgents activated themselves. Computer consoles around the planet became impossible to operate, but no one was around to notice. Automated weapons systems became soldiers for the insurgency, but found no living targets to exterminate.

Events

Cubots Attack!

Though the computers in the dome are unreliable, they are still able to carry out some of the instructions left by Pākurakura's insurgents. At the moment the PCs gain entrance to the dome's central chamber, the dome's computers will transmit a brief long-range microwave signal. This signal will activate the cubots and instruct them to kill everyone in and around the facility. After receiving this signal, the cubots will rely on their own internal programming and require no further control from the dome.

The signal from the dome will remove any MANUAL CONTROL aspects the PCs had placed on the cubots. Placing a new MANUAL CONTROL aspect on a cubot now faces Great (+4) opposition.

The following cubots will attack:

- Twelve cubots that had been buried in the sand around the Clock. This includes any cubots the PCs found and examined.
- Three cubots that Cielo and Hariri had found and hidden in their ship's hold. These will blast their way out of the crates they're locked inside.
- Six cubots inside the dome's central chamber.

The cubots will hover at walking speed, measuring the mass and density of nearby objects to identify organic beings. They travel in mobs of three when possible. They are small-scale targets, and their lasers are small-scale weapons (page 34).

Cubot

ASPECTS

Destroy the Intruders

SKILLS

Average (+1): Combat, Notice

NOTES

No stress or consequences. A single hit takes out a cubot.



Mysterious Vanishings

Subject: Mysterious phenomena that occur at the same time every night **Opposition:** Superb (+5)

Discovery: Some unknown influence is opening a metageometric tunnel between Pākurakura and another planet.

Project Duration: A few days

On the night after the PCs arrive on Pākurakura, roughly an hour after midnight, harsh winds will converge on the Clock from all directions, filling the air with thick scouring clouds of sand.

Within the dome, all the computer consoles throughout the building will show signs of rapid activity. In the central chamber, the geodesic sphere will begin to rotate, and its panels will drift a few centimeters apart, filling the chamber with a blinding light. The faint whine produced by the sphere will rise to ear-splitting volume. Anyone remaining in the chamber for more than a few moments will become DEAFENED until the end of the scene.

Wristcomps will still be unable to identify what is inside the sphere, but they will show that it produces a gravity-warping effect, similar to the effect generated by a ship's gravity bender during metageometric travel, but several orders of magnitude more powerful. The braided metal rings surrounding the sphere seem to reflect, focus, and guide the gravity distortions.

Outside, a red glow a few meters wide will appear at seemingly random locations throughout the area, never remaining in one place for more than a few seconds. It will never appear inside a building or around a solid object. The faint sound of a male human voice calling for help will sometimes accompany the light. Due to the storm's loud winds and dust clouds, the light and the voice will only be detectable from ten or twenty meters away. If any PC out in the storm successfully overcomes Good (+3) opposition using Notice, that PC will either see the light or hear the voice. If Cielo hears the voice, she will recognize the voice as belonging to Aziz Hariri.

Wristcomps and the ship's sensors will show gravity fluctuations within the red glow. The patterns are consistent with a metageometric effect, though human science suggests this sort of effect is impossible within a planet's gravity field.

If anything smaller than three meters in any dimension enters the glow, that object will disappear from Pākurakura. Anything larger will be held in place, as if by an enormous force, but will not leave the planet.

After five minutes, the geodesic sphere inside the dome will close up and coast to a stop. The activity in the dome's computers will subside, and the sandstorm will fade.

The activity in the dome will begin every night at the same time, as will the sandstorm, the red glow, and the voice. Due to the translocator chamber's shielding, the PCs won't be able to determine that the dome is the source of the metageometric tunnel until they gain access to the translocator.

If the PCs research the red glow and its accompanying gravity fluctuations, they will discover that some unknown influence is opening a metageometric tunnel for brief intervals in the middle of the night, connecting Pākurakura to a distant location. This discovery will allow the PCs to predict where and when the tunnel will appear as it jumps around the area. If the PCs send something or someone through the tunnel, read the *"Through the Tunnel"* section (page 55).

The Dreadnought

Five hundred kilometers to the north of the Clock, an automated war machine lies on the rocky slope of a mountain range. Before Sigma found Pākurakura, the insurgents had compromised the computers of this dreadnought and had commanded it to destroy its former masters. After the planet's inhabitants vanished, the dreadnought spent centuries searching for targets before giving up, parking on a mountainside and shutting down.

This vehicle will receive the same signal that the Clock dome used to awaken the nearby cubots. The ancient dreadnought is not nearly as agile as it once was, and it will take a full day for the machine to return to full power after it receives the command signal. Once active, the dreadnought will rise into the air and advance slowly toward the Clock, while broadcasting its own microwave signal.

The PCs will receive this signal on their wristcomps and the ship's comm suite. It is a symbolic message, delivered in the written language of the prior inhabitants of Pākurakura:

Government lackeys! Your era of	Equinnant averagei rain any aq
oppression and deceit is at an	אא ויש ושרעה באריידע ארפאיידידענבער
end. We, the defenders of free-	りい≐、辿り、 4×り ≐りやりい≐りいや つや やいりう≐つべ、
dom, have turned your weapons	אימאסגסג וימכפגריק טופג ≑רמטוז רחגא
against you. The tools you once	CL ÷phi pong igs arggel pat ings
used to enforce your power over	ନ୍ଟର୍ମ ଜ୍ୟା ମଧ୍ୟର ମଧ୍ୟରେ ମହିଥିବା
us will deliver justice on behalf of	¢e draann ne roghthk undraf
your victims. When your strong-	South thes near inversion over
holds are nothing but smoke and	ראבאי דייט אארכמ הרא הילגבא
rubble, we will build a new utopia	১N≓ এরণেরেন, দেন দেরের দেরের≑ ১ Nন্দ
and condemn your memories to	-ELLA PUPE NALENES FIN YORS-
the waste pile of history.	גטפרוישא טע רדשה רויגה ראו בו וירשט.

This message will repeat indefinitely. Responding to the signal will have no effect on the dreadnought.

The war machine is a quarter-kilometer long and fifty meters wide. It travels a hundred meters above the planet's surface, levitating with a more powerful version of the gravity effect demonstrated by the cubots. It is a large-scale target, and its laser cannons are large-scale weapons (page 34). The dreadnought will arrive at the Clock after a half-day of travel. When it is forty kilometers away, it will have a clear line of sight to the facility and will open fire with its laser weapons. It will first target living beings and vehicles, including the *Little Winds* and the Xenohistory ship. If these targets are not available, it will attack the Clock buildings. It will take fifteen minutes of sustained laser fire from the dreadnought to burn through the walls of the dome and destroy the translocator. The range of the dreadnought's cannons are equal to the range of the Xenohistory ship's subnuclear beam, which is sufficient to hit a spacecraft in orbit.

The dreadnought is big and slow, which makes it an easy target, but its hull is heavily reinforced. When it defends with Combat, this represents the dreadnought's armor plating shrugging off attacks, not an evasive maneuver.

If the PCs have already discovered how to control the cubots, or if they have discovered the cause of the glitches in the Clock's computers, they can attempt to use microwave signals to hack into the dreadnought's computers. This is an attack with Tech against the dreadnought, which defends with Tech. Taking out the dreadnought with a Tech attack shuts down its computers, and it crashes into the ground. If the PCs are close enough to deliver an electronic attack, they are close enough for the dreadnought to retaliate with its lasers.

Dreadnought

ASPECTS

Heavy Aerial Gunboat; Reprogrammed to Wreak Havoc

SKILLS

Superb (+5): Combat Great (+4): Tech Good (+3): Notice Average (+2): Pilot

CONSEQUENCES Mild (2):

Moderate (4): Severe (6):

NOTES

Vehicles don't have stress boxes.

Through the Tunnel

After the PCs repair the glitches in the dome's computers and discover the translocator's purpose, they can open the metageometric tunnel to Bagatao whenever they wish. The tunnel can only remain open for five minutes at a time, and after it closes the translocator must spend at least an hour recalibrating before it can open the tunnel again. The translocator's designers intended the near end of the tunnel to open on the platform on top of the dome, but the PCs can choose to open the tunnel anywhere within a quarter-kilometer of the translocator.

A character stepping into the tunnel will experience a disorienting jolt, and will emerge in mid-air, ten meters above the ground, in a Bagatao jungle. Treat the fall as a Fair (+2) physical attack that the character may defend against using Athletics. The altitude of this end of the tunnel is a defect in the translocator, and though the PCs can ensure that the tunnel will always open at the same location on Bagatao, they cannot bring it closer to the planet's surface.

The jungle is two thousand kilometers away from the Bagatao colony, and on a different continent. When Aziz Hariri arrived here, the fall did not injure him seriously, but it did smash his wristcomp, leaving him unable to contact the colony for help. Although the Bagatao end of the tunnel continues to re-open in roughly the same area, it is too high for him to reach. Since Hariri couldn't predict exactly where the tunnel would open, he couldn't climb the nearby trees quickly enough to reach the tunnel before it disappeared. The best he could do was get close enough to shout up at it and hope someone heard him.

Anyone arriving on Bagatao with an intact wristcomp can contact the colony and ask to be picked up, although explaining how they arrived on Bagatao may be difficult. Since the colony receives regular visits from Earth, there is a supply ship at Bagatao that the PCs can use to return to Earth.

The PCs may rescue Hariri without entering the tunnel themselves, by throwing a rope through the tunnel and hanging on to one end. This won't be possible until the PCs can control the translocator, because while it is operating randomly, the tunnel remains open for only a few seconds at a time and closes before Hariri can reach the rope and climb up.

The design of the translocator only permits it to open a tunnel between the Clock and the jungle of Bagatao. The translocator cannot reach any other destination unless it is completely rebuilt, and such a feat is far beyond current human capability.

Afterwards

Discovering a means of instantaneous interstellar travel has enormous implications for human science, but will not transform space flight overnight. Exploring the relevant scientific principles and duplicating the technology of Pākurakura may take decades. Also, the translocator was an experimental device, the first of its kind. Repeated use of the technology may have consequences that the scientists of Pākurakura could not predict. GMs, if players try to use the translocator to violate the principles of causality or otherwise break the universe, you may declare that the machine fails permanently.