For Referees Only

Who were the Ancients? What were they doing when they roamed the galaxy 300,000 years ago? Why did they destroy themselves in a cataclysmic Final War that destroyed entire planets?

The answer lies hidden somewhere, and the clues are all around. Join a band of adventurers confronted with the greatest puzzle of the ages as they try to solve it.

Adventure 12 Secret of the Ancients

TRAVELLER[®] Science-Fiction Adventure in the Far Future

Game Designers' Workshop

Adventure 12 Secret of the Ancients

TRAVELLER® Science-Fiction Adventure in the Far Future

Game Designers' Workshop

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Secret of the Ancients TRAVELLER, Adventure 12

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This booklet is an adventure for **Traveller**, GDW's science fiction role-playing game set in the far future.

Traveller is GDW's trademark for its science fiction role-playing game materials.

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Introduction

This booklet is a comprehensive adventure for **Traveller** titled *The Secret of the Ancients*. Set in the Regina subsector of the Spinward Marches, this adventure concentrates on a search for an archeological site which can reveal who the mysterious Ancients were and perhaps solve the puzzle of their history.

This adventure is the climax to a trilogy begun with **Traveller** Adventure 2, *Research Station Gamma* and continued in **Traveller** Adventure 3, *Twilight's Peak*. Both of those previous situations are intriguing adventures, but are not absolutely necessary as predecessors to this adventure.

It is assumed that this adventure will be administered by a referee who has read through this booklet and who is familiar with both it and the rules for **Traveller**.

Traveller Materials: The only required **Traveller** materials needed for this adventure are the basic rules; any rules set will do- Basic **Traveller**, Deluxe **Traveller**, Starter **Traveller**, or The **Traveller** Book.

Useful Materials: The entire range of **Traveller** products can be used with ease in this adventure. Book 4, *Mercenary* can prove useful if military operations or special weapons are called for. Book 6, *Scouts* can be used to generate additional worlds in a star system if they are called for. *Library Data (A-M)* and *Library Data (N-Z)* can provide background for the **Traveller** universe during the adventure. Various supplements can provide additional materials or data as the game progresses. Anything that adds to the adventure can be used by the referee during this adventure.

CHARACTERS

Each player should generate a player character using the **Traveller** rules before the adventure begins. The character types involved are of no specific importance; the players may generate any character type they desire, subject only to the applicable rules. Two points are important however: a ship and a central character.

A Ship: The availability of a ship will greatly enhance the ability of the travellers to handle the events placed before them. Consequently, the referee should try to ensure that the group has a ship at its disposal.

The Central Character: The events of this adventure swirl around one character an adventurer named Trow Backett, heir to an Ancient artifact. One of the player characters should be designated as this adventurer by the referee. Specific names, however, are unimportant, and it can easily be changed as the referee or circumstances dictate.

SPECIAL CHARACTER TYPES

Some situations in the course of the adventure may call for non-human character types. For example, a player who has learned in earlier adventures that the Droyne are descended from the Ancients may want to run a Droyne character in this adventure which finally reveals who the Ancients were. Another player who knows that the Vargr were created from Terran dogs through genetic manipulation by the Ancients may want to run a Vargr character.

Droyne character generation is provided in Adventure 3, *Twilight's Peak*. Droyne characters should be of the sport caste adventuring alone until they joined the adventuring team.

Vargr character generation is provided in *The Traveller Adventure*. Vargr characters may be of any character type available.

EQUIPMENT

Characters may purchase equipment to suit their needs or imagined needs before the adventure begins. The starting point for the adventure is Regina, capital of the Regina subsector. Its tech level of 10 and law level of 9 should be taken as effective limits on the equipment available.

BACKGROUND

Events in this adventure take place against the background of the Third Imperium, an interstellar empire more than a thousand years old and encompassing more than 11,000 star systems across 200 parsecs. The Imperium is human-dominated and benefits from the fact that humans have independently thrived on more than 40 worlds for hundreds of thousands of years — although human star travel has taken place only in the last ten thousand years.

Humans in the Imperium all know a few basic facts:

1. Humans originated on Terra. About 300,000 years ago, the Ancients visited Terra and took sample populations with them to other worlds.

2. The Ancients became involved in an extensive conflict called the Final War and almost completely destroyed themselves in the process. Their humans were left to develop on their own, and on more than forty worlds they survived and developed technology on their own.

3. Three human races (the Vilani, Zhodani, and Solomani) developed jump drives and reached out to colonize the stars. Along the way, they met the other human races as well as myriad intelligent alien races. Each established its own interstellar empire to rule the stars; the Third Imperium is shared by Vilani and Solomani.

4. The Ancients remain a mystery. Evidence of their actions or interference remains, but no one knows who they really were or why they acted as they did. No one even knows if someday they might come back.

More information becomes available in the course of the adventure.

Few people ever have an opportunity to actually investigate the Ancients— to try to puzzle out their motives or their history. For the few adventurers in this expedition, the chance has come to find the secret of the Ancients.

BEGINNING THE ADVENTURE

Once the synopsis is read and understood, the adventure begins with the chapter titles **Beginnings**.

Adventure Synopsis

Vlen Backett was for years an adventurer in the Spinward Marches. He travelled the main routes and the back routes, finding work on any starship that would hire him on. In the course of his adventures, he visited every subsector in the Marches (and a few outside the Marches as well); he explored unsettled worlds, fought in mercenary companies, even served in an Imperial unit during the False War. After the war, however, Vlen Backett retired to a small estate on Regina and kept to himself. He has been a recluse for the past nearly thirty years.

Trow Backett grew up treasuring the stories of adventure his Uncle Vlen told him every time he called at Regina, and when he was old enough he took up adventuring as well. Trow returns to Regina at the end of one journey to find that Uncle Vlen has died.

Trow finds that he is an heir, receiving Cr10,000 and a few personal effects, among them a diary and a pewter statuette about 100cm tall. The diary includes information about VIen Backett's adventures; the statuette is one Trow recognizes – his uncle told the story of finding it many times.

VLEN BACKETT'S STORY

In 1077, Backett was an engineer aboard the **Suni Maru**, a merchant whose captain decided to pay a visit to the interdicted worlds of Sonthert (Lanth 0308), Victoria (Lanth 0207), and Ylaven (Lanth 0306). The captain thought he would try for a quick profit carrying manufactured goods in, and specialty fruits and novelties out.

Once in the system things started to go wrong. The drive fractured a transverse connecting link just after landing on Victoria, and Backett had to repair it. The crew left him in the ship as they travelled the world exploring. He spent several weeks fabricating the intricate part in the ship's machine shop, only to find that it didn't work properly. He tried again, and his second try didn't work either.

Backett, by this time both frustrated by his lack of success and exasperated that the rest of the crew was not involved in the work, decided it was time for a break. The crew had found an Ancient site on Albert, Victoria's moon, and explored it. They had visited several settlements and made some excellent trades with the locals. They had gone hunting in Victoria's forests. Backett took a day to visit the Ancient site, which it turned out had been looted long ago, and the elected to go hunting.

Stalking an ivory gazelle, Backett was led deeper and deeper into the forest. Suddenly, he broke into a small clearing and what he saw made him quit his hunt and start exploring. The clearing held an Ancient site: apparently a residence. Later, Backett loved to tell about the wonders and magics he found in that little warren of rooms and closets. His descriptions of the shimmering walls, the doors of cloudmist, the floors of focussed gravity, the paper-thin but steel strong partitions, the many fantastic sight and sounds were, he himself admitted, inadequate.

If Victoria weren't interdicted and he hadn't been there illegally, he would have reported the site and claimed a reward for discovering it. As it was, he contented himself with handfuls of souvenirs which he later sold or gave away to friends.

But his favorite souvenir was a pair of heavy metal statuettes, and he kept them for most of his adventuring life. These small figurines are very stylized representations of an upright biped with wings. The base is symmetrical, with helical grooves cut around its circumference. Backett himself saw the statuettes as representing angels; others have seen the figures as people, humans or alien. He realized that they were valuable Ancient artifacts, but he was never able to classify them as anything beyond pieces of artwork. Actually, they were navigation guidance modules used in operating at some classes of Ancient ship.

Backett returned from his break, but didn't tell the rest of the crew what he had found. He went right to work and was successful in fabricating the replacement part; it lasted long enough for the *Suni Maru* to make it back to civilization.

In 1105, Backett quit the adventuring life and settled down. To finance purchase of a comfortable condominium on Regina, he sold one of the statuettes to a wealthy artifact collector—for Cr120,000. The deal brought a good price partly because traffic in unregistered Ancient artifacts is illegal under Imperial law.

Backett's affection for his nephew is reflected in his bequest to him of the remaining statuette.

THE ADVENTURE

Trow Backett's inheritance is routine except for the statuette, which happens to be the key to everything that happens.

Soon after claiming the statuette, Backett is attacked by a band of thugs obviously bent on acquiring the statuette. They may or may not be successful, but if they are, Backett will need to move to recover the figurine. The attack shows the players that someone else is interested in the artifact.

Relatively quickly after the incident, Backett hears that Imperial authorities are interested in the artifact as well, and that they have called on several other heirs looking for it; soon enough, the trail will lead them to Backett. He also hears that the first figurine (the one sold by VIen Backett to a collector) has been confiscated as unregistered. This Imperial interest shows Backett that the artifact is perhaps more valuable than he had thought.

Clues: Backett inquires into the nature of the artifact, hoping to find out more information about it. Most of his research is fruitless, but he does run into three items of information which may help him.

The first piece of data is the basic information anyone can find concerning the Ancients. This material indicates the basic situation that has puzzled humaniti (and other races) ever since they discovered that the Ancients had once existed.

The second piece of information comes only by chance. As Backett reads through his uncle's diary, he finds a passage which talks about leaving Victoria on board the *Suni Maru*. Uncle Vlen has scanned the location of the Ancient site with sensors and had been unable to obtain a reading of any kind; the site was effectively invisible to sensors. He was unable to determine whether this was because of the materials from which the site was constructed, or from a deliberate screening device. The only trace of the site which he was able to find was a faint, delayed echo in the G band, a very obscure communication band. Later entries in the diary show that he many times scanned worlds in this band looking for other sites like the first one. On two or three occasions, he found a response, but when he investigated, was turned away by the authorities. Once it was confirmed that the location was an Ancient site; other times, the area was simply posted and patrolled with no explanation (probably clandestine excavations of Ancient sites).

The third clue is a lead to the location of an Ancient site. It comes in the form of a minor warning to spacers posted at the starport. A near accident occurred at Komesh, the large gas giant in the Boughene system. A merchant, in the course of refuelling, nearly collided with a navy ship because of interference in the communicator channels, specifically in the G band. Because of the occurrence of interference in this band at this gas giant, ships should be careful to use E or F bands instead of the G band.

Boughene's Gas Giant: That clue should lead to an investigation of the gas giant. Approaching the gas giant and scanning in the G band produces a faint return signal from the gas giant surface: an Ancient site! The task at hand is to descend to the surface of the world, find the site, investigate it and even loot it, and then sell the Imperium the location. This treasure is worth millions.

Mounting an expedition to the surface of a gas giant is a major undertaking. Proper research, preparation, and execution is necessary if the undertaking is to be a success. After a long period of preparation and searching, the elusive Ancient site is found.

The Ancient Site: The site is a base or village mounted on anti-grav pylons and drifting through the atmosphere of the gas giant. Although it has not been destroyed, it does appear to have been cleared out.

Under time constraints in this pressure, atmosphere, weather, and gravity, the explorers can nevertheless search for whatever they can find of value. They do find a few pieces of garbage artifacts and a starmap. In the course of the exploration, an Ancient ship is found as well. **The Ship:** The group enters and investigates the ship, finding breatheable atmosphere inside it and more puzzles to figure out. Finally, the ship carries them out and across the parsecs to a point in deep space.

Along the way, the group has a chance to find out the capabilities of the ship and investigates its drives, its teleportation doors, and its controls.

The Portal. The ship finally arrives at a point in deep space midway between Enope and Wochiers. There, suspended in vacuum is a shimmering disk several hundred meters in diameter. After pausing briefly, the ship plunges into it, to emerge—somewhere else!

This place is a pocket universe, although that answer is not immediately obvious to the group. Three stars are visible, each about a parsec distant. The ship proceeds to one system and lands.

This place is the Ancient site to end all Ancient sites! Its inhabited, there is traffic, the buildings are occupied. And no one pays any attention to the group, which is free to wander about.

After a time, and without warning, the group is immobilized, after which a group of beings gather up the adventurers and transport them to another world in the system where they are released (but still kept prisoner by invisible forces). After some delay and after the adventures have tried to escape and failed (perhaps several times), they are visited by a group of beings, one of whom is a true Ancient – Grandfather. Through an interpreter, he asks them where they came from, why they are here, and inquires about other news about the universe.

Grandfather: The Ancient had been unaware that there was a portal still open to his pocket universe, and indicates that he will now close it. The group is welcome to remain here. If asked, he allows them to return to the real universe, but he says

that he will dive the ship into a star after it has delivered them to their own ship.

The Trip Back: On the trip back, the group can loot the ship, using their vacc suits and other equipment to break in to the component parts of the ship in order to detach and take its teleportation panels. Properly done, these panels will still work and can be kept and used later.

The ship arrives at the Boughene system, drops the group off, and then destroys itself.

ADVENTURE'S END

With the return of the group to their ship at Boughene, the adventure formally ends. They can, however, receive several rewards for their labors (in addition to knowing the secret of the Ancients).

The group can report the location of the Ancient site on the gas giant and claim a reward from the Imperium.

Some of the artifacts which the group has accumulated can be sold or kept for later use.

The teleportation disks can investigated to determine their properties and the restrictions on their use. They may be sold or kept as the group desires.

REFEREE'S NOTES

The synopsis explains what happens in this adventure, and the rest of this booklet is devoted to further explanations of the technological marvels to be encountered and the strange sites to be visited.

The referee, however, must be careful to administer the adventure rather than just to tell it. As the the events take place, the referee describes what is found, describes what happens as a result of various activities, and describes the actions or reactions of environment and situation. The referee should not simply read from this booklet, and definitely should not explain why events take place.

The player characters, as they deal with the situation, will definitely reach their own conclusions as the explanations for events. They will then depend on their own conclusions as they move through subsequent events. If their conclusions are correct, they should then be better equipped to respond to later events; if not, then they are handicapped.

For example, the Ancient ship maneuvering in the gas giant's atmosphere does not look like an ordinary ship. It may instead be seen as a menacing security device, a form of local animal life, or even another type of Ancient site. Only through investigation can the group actually determine what it is.

The Adventure Begins

The first sign of the adventure beginning is the message Trow Backett receives telling him that his Uncle Vlen has died. This message can be delivered anywhere and under any circumstances, and the first step is for Trow and the other adventurers to proceed to Regina in order to pay their last respects and claim Trow's inheritance.

Remembering: Along the way, Trow can relate to the other players what he remembers of his Uncle Vlen (the referee can relate the information relevant to this as given in the synopsis as Vlen Backett's story.

Claiming the Inheritance: Once on Regina, it is a simple procedure to file certain required papers and to then receive what Uncle VIen left Trow.

The inheritance consists of Cr10,000 (paid in cash), Uncle Vlen's identity bracelet, his diary, and a sealed envelope.

The envelope is addressed to Trow, and its message informs him that Uncle Vlen wants him to have his Ancient statuette, but because it is unregistered, Trow must find it himself. This procedure to intended to keep the authorities from confiscating it.

THE THUGS

Someone else wants the statuette and knows that Vlen had it. As a result, the adventurers are attacked almost immediately after leaving the lawyer's office and collecting the inheritance.

The purpose of the thugs' attack is to steal the statuette. The assailants have wrongly concluded that the statuette was turned over to Trow with the other effects.

Referee: Create a band of thugs about equal in number to the adventures in order to carry out the attack. If the thugs succeed, they steal Trow's money and the other effects, but they do not get the statuette; if the adventurers triumph, they drive the group off and they are warned that someone wants the statuette. Throw 9 + for one of the thugs to be captured, and after questioning to reveal that they were hired by an artifact collector intent on finding the mate to a statuette he already has.

The information about the artifact collector is enough to allow him to be located. If the adventurers choose to locate and confront the collector, they can plan out exactly how to safely make the encounter.

The collector has an extensive accumulation of Ancient artifacts as well as references on the subject. If the collector can be convinced to cooperate, he can share his information with the group, making much of the research phase of the adventure unnecessary.

Shimmersuits: The collector has five operating shimmersuits which he has accumulated over the past several years. He is willing to loan them to the group in exchange for a share in any finds they make (he initially asks for half, but can be bargained down to a tenth).

If other needs of the group come up (money, a ship, help with the authorities), this collector can serve as a patron for them.

THE IMPERIALS

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That evening after the inheritance is claimed, Trow will be visited by two Imperial agents. They explain the strict Imperial laws concerning possession of unregistered Ancient artifacts, and express some surprise that Trow does not have the statuette that his uncle had.

Depending on their reaction throws, the agents may accept Trow's story, or they may insist on searching Trow and his friends for the artifact. Ultimately, however, they must accept that Trow does not have it.

RETRIEVING THE STATUETTE

Uncle Vlen has left instructions for Trow which direct him to Vlen's condominium. The statuette has been hidden in a heating duct well inside a wall in the living area in such a way that no one would find it unless they were specifically looking in that location.

The exact circumstances of the retreival of the statuette can be dictated by the characters and their dispositions: burglary comes immediately to mind for some, but others may want to try gaining the confidence of the current tenants, or impersonating Imperial agents making a search.

CURIOSITY

Acquisition fo the statuette and the confrontations with the thugs and the Imperial agents are intended to arouse the players' curiosity about the statuette, and about the Ancients in general.

That curiosity can then be temporarily satisfied by researching library data and finding what information is known about the Ancients in available records.

Meanwhile, Trow (or someone in the group) can read the diary and find the information presented in the synopsis concerning the G band signals from Ancient sites.

THE FINAL CLUE

The last step is a warning to spacers about G band interference at Komesh, the large gas giant of the Boughene system. With this information, the group is ready for an expedition in search of an Ancient site at Komesh.

Known Data

Available information about the Ancients has grown over the centuries as new excavations have been completed and as newly available artifacts have been analyzed.

The Ancients: Scattered throughout known space are the ruins of a civilization which once dominated this region of the galaxy. Early explorations by the Vilani thought each ruined site to be representative of a different race, but excavations and explorations soon showed that this was not so— they were all examples of the same civilization.

The antiquity of these sites (showed by various dating methods) gave rise to the term Ancients to generally describe this vanished race. All sites have been dated as established at around -300,000. The allowance for error in the dating methods is about 10,000 years: the conclusion is that the Ancient civilization lasted less than 20,000 years in total.

This Ancient civilization was wide ranging. Confirmed Ancient sites have been found in every sector of the Imperium, as well as throughout Vargr and Aslan territory. It is reported, but unconfirmed, that Ancient sites also occur with great frequency in Zhodani territory. The total number of confirmed Ancient sites visited by the Imperium is more than 200.

The Ancients never had an especially great population. The planets they settled usually had only one, or at most a handful, of bases. Estimates of population vary, but do not exceed one million per world.

Some investigators believe that their high population worlds held billions, and that these were reduced to asteroid belts; that only low population worlds were not completely destroyed. Others counter that none of the evidence found in the asteroid belts confirms this.

If the asteroid belts created by the Ancients were worlds with populations in the billions or tens of billions, then total population of the Ancients at their height could have been in the trillions. If those worlds, like other Ancient sites, held no more than one million each, then the total population of the Ancients has been estimated at less than one billion.

The Final War: The Ancients' civilization was destroyed in a cataclysmic war. Over a period of about 2,000 years, they fought with such ferocity that archeologists today work under a severe handicap trying to piece together the bits and fragments that remain.

The Final War was fought with technology far beyond that available to the Imperium, or to any civilization extant. Estimates place the resources used at tech level 25 or greater: a level virtually incomprehensible to those investigating the war.

The weapons of the Final War were brutal in their power. They were capable of great destruction; entire planets were reduced to asteroid belts by what must have been planet-buster bombs. In other cases, planetoids and small moons were seized, moved, and directed toward planets to obliterate what must have been bases, cities, and installations. Many worlds still bear the marks of such attacks.

The weapons of the Final War were also sophisticated. Entire worlds appear to have escaped unscathed from the war; only when an Ancient site is discovered does it become apparent that that particular site was the target of an attack. There is no evidence of misses, no pattern bombing, no random attacks. What was attacked was hit; high technology controlled the attacks.

Technology: The most striking aspect of Ancient technology is not its high level, but its diversity. Of the hundreds of Ancient sites which have been excavated and analyzed, each appears to express a different *type* of technology. It would be easy to take each site as a different culture or technology.

One site might use familiar screw fasteners, while another would depend on adhesives for the same tasks. Still others depend on rivits, or interlocking ellipsoids, or silicon plastic clamps.

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One site might show evidence that it used silicon chip circuits; another performed the same function with fiber optics, still another used fluid dynamics, yet another used channelled heat transfer.

It appears that each site involved the near total re-invention of even basic technology as it was constructed.

Even writing, data formats, recording formats, systems and standards vary between sites. The high technology equipment is entirely compatible within a site, but rarely do artifacts from different sites show any ability to function together.

Site Locations: Imperial studies of the reported locations of Ancient sites have produced some statistical data. The results are purely statistical, but point toward certain conclusions.

Overall, the frequency of Ancient sites declines with distance from a central point. That central point is somewhere in the Spinward Marches.

Humaniti: It has been fairly well established that the Ancients were responsible for transporting humans from Terra to a number of other worlds. It is estimated that humans were taken to more than a hundred worlds, with evidence of their presence on at least 90 worlds. On about 40 worlds, humans took root, surviving a period of barbarism before achieving civilization.

Once the Solomani Hypothesis (which theorized that all humaniti came originally from Terra) was accepted, it was a simple matter to analyze the gene pools available to each of the distinct human races found on worlds other than Terra. Those studies have concluded that the Ancients visited Terra many times, taking groups of between 1,000 and 10,000 humans to each of perhaps 100 planets.

The reason for Ancient interest in humaniti is unknown. Theories involving humans as slaves, assistants, workers, even as pets have been advanced, but there is not enough evidence to support any specific conjecture.

Genetic Engineering: The Ancients had great capabilities as genetic engineers. They were capable of altering living matter to perform specific tasks or fill specific functions. Many life forms still exist today which have been shown to be the result of Ancient genetic tampering.

Vargr: At approximately the same time that the Ancients snatched human samples from Terra, they took samples of dogs. Those dogs were genetically engineered to produce an upright posture, an opposed thumb, and intelligence.

Just as the reason for Ancient interest in humaniti is unknown, so is the the reason for the Ancients interference in creating the Vargr.

Droyne: Although the Droyne are well known as a race, and have been the subject of extensive research by academics, it is only recently that the relationship be-

tween the Ancients and the Droyne has been even partially understood.

The Droyne are known to be physically identical with the Ancients. That is to say, the known installations of the Ancients are physically compatible with the dimensions and requirements of the Droyne. Doors and furniture are best adapted to the limbs and sizes of the Droyne; ledges and balconies are compatible with the flying abilities of the Droyne; pictorial representations of Droyne can be found in many known Anciient sites.

What remains unknown is why the Droyne show no signs of having retained the superior technology of the Ancients.

The Ancient Homeworld: No one has found the Ancient homeworld.

Investigators always hope that the next Ancient site they discover will be the homeworld; theoretically there would be fossil evidence that the Ancients had evolved on such a world and the evidence would confirm the find.

Some propose that the search is futile: the homeworld was undoubtedly reduced to an asteroid belt during the Final War.

Others have at least conjectured as to what the Ancient homeworld would be like. They have analyzed the Droyne and determined that that race evolved on a small world (size 3 to 6) with a standard or dense atmosphere (6 or 8) and at least some water (hydrographics 3+). They base this on the fact that the Droyne have wings and can fly if the world is small enough and the atmosphere dense enough. The requirement for water is dictated by the initial evolutionary needs as well as the continuing need for water for survival.

World-Bending: In some cases, the Droyne have moved whole worlds. Their exploits in such matters were so great that even the Final War was unable to destroy them.

The Ancients created a rosette of five worlds at Tireen (in the Vargr Extents). Five planets were shifted into points equidistant from each other in the same orbit and then transformed into identical habitats. Evidence as to what the worlds were like before the shift is lacking, so the degree of transformation is unknown, but even shifting worlds in their orbits consumes unbelievable amounts of energy, and the Ancients shifted at least four worlds in that system.

Each of the worlds has physical characteristics 484, which indicates that the worlds would be especially hospitable to Droyne. At least one of the worlds in the rosette was inhabited by Droyne when the system was discovered by Vargr in -2530, but they have since died out.

The Ancients also created a ringworld in the Leenitakot system of the Hinterworlds. Even their approach to building a ringworld puzzles the experts. It circles a dim M1 V star at less than 30 million kilometers. The ringworld is a narrow band less than 100,000 kilometers wide, and the construction looks unfinished, without soils, atmosphere, or any provision for life to live on its inner surface. And even so, this small ringworld has an inner surface area equal to 25,000 Terras.

Black Globes: Rarely do excavations of Ancient sites produce working artifacts. One site proved to be a treasure trove with more than 2,000 operating black globe generators almost waiting to be installed in Imperial ships. Black globes typify the incomprehensible artifacts of the Ancients: each of the devices found is a small metal device measuring about 300 cm on a side with a shiny metal finish. Two minor discolorations on the surface are the on and off switches.

When the device is activated, it projects a black force field in a sphere around the device at a radius of about one meter. In the first experiments with the device, a researcher was cut in half by the force field when he touched the switch; in the second, it was activated remotely by a rod. Both of the black globes could not then be turned off because the off switch was inside the force field.

The black globe was adopted by the Imperial Navy as a form of armor for its fighting ships. Using the many black globe devices found, the Navy has been able to produce crude duplicates of them, but researchers are still a long way from a good understanding of how these devices work.

THEORIES

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Many theories about the Ancients have been formed based on the available evidence. The three major theories currently in vogue are:

1. Conflict: The Ancients were divided into many different subraces, nationalities, tribes, or other groups, and that competition between these groups was a continuing part of their lives. High intelligence was natural to the Ancients, and as a consequence, their struggle against nature was an easy task; their struggles against each other was somewhat more difficult. In the end, the differences between their groups led to a genocidal war which extinguished the entire race.

This theory dwells on the Final War aspects of the Ancients,

2. *Migration:* Some event or series of events convinced the Ancients to leave this region of space for another. After the migration fleets were constructed, but before they left, the Ancients destroyed all traces of their present civilization. The Ancients still exist somewhere in the universe.

This theory explains the Final War as a sort of tidying up before departing. It explains in understandable human terms why the Ancients are no longer around, and expresses the fear that they might someday return.

3. Peaking Out: The Ancients' achievements in technology eventually reached their limit, and with that limit came a sort of racial depression. Having come so far, the Ancients found that they could go no farther, and committed racial suicide rather than face continued stagnation. The Final War was a sort of suicidal final project which involved everyone.

Some Ancients did not want to commit suicide; they were genetically altered to make them happier with a simple existence, and they are today known as the Droyne.

This theory assumes the cooperation of everyone in suicide. Some modifications have been proposed to make the Final War a conflict between the Suicidists and the Survivalists. As such, it is a refinement of the conflict theory.

4. Conquest. As the Ancients expanded out into the universe, they encountered another culture as technologically advanced above them as they were above us. That superior race determined or predicted that the Ancients could become rivals or enemies to them at some point in the future, and decided to crush them before they did. The result was the Final War.

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This theory accounts for the near complete destruction of the Ancients, but no one has ever found evidence that a culture superior to the Ancients ever existed.

Komesh

At first glance, the idea of descending to the surface of a gas giant seems impossible—the gravity alone would be intolerable. Combine that with fierce winds, extreme temperature, and exotic atmospheric elements, and the task seems beyond accomplishment. Detailed analysis, however, shows that such an expedition is possible; library data entries for the Ansing Expedition show that such an undertaking is possible.

The focus of this expedition is the largest planet of the Boughene system: a large gas giant named Komesh. Komesh has an equatorial diameter of 72,000 km (this diameter is measured to the point where atmospheric pressure is the equivalent of a standard atmosphere, even though the surface of the planet lies many hundreds of kilometers below that).

Because the surface is indistinct, altitude is measured from the center of the planet. The outer edge of the atmosphere is at about altitude 37,000 km.

Atmosphere: The atmosphere of the gas giant is about 89% hydrogen and 10% helium. The remaining 1% of the atmosphere is composed of a variety of compounds, primarily water vapor, methane, and ammonia.

The most striking feature of the atmosphere is its many layers of clouds, most of which are concentrated between 36,000 and 37,000 kilometers altitude. At the upper range of this limit, the clouds are water vapor and ice crystals; at the lower limit, they are ammonia crystals.

The atmosphere characteristics table shows the pressure and temperature properties of the atmosphere of Komesh at altitudes between 33,000 and 38,000 km.

Light: At the upper levels of the gas giant's atmosphere, light from the local star is available (although not especially bright). During local day, light levels are equivalent to early evening; at night, things get quite dark.

Once below the cloud cover, the light level decreases rapidly, and by an altitude of 35,000 km, the atmosphere is in almost total darkness.

GRAVITY

The initial problem involved in challenging a gas giant is gravity. The tug of gravity must be overcome by an expedition into the gas giant.

Ships: Ships and small craft can venture into a gas giant's atmosphere if they are streamlined and have sufficient maneuver drive capabilty.

Most ships refuelling from a gas giant rarely venture below the level of 0.5 atmospheres (36,500 km altitude on Komesh). In order for a ship to enter the atmosphere, stop, hover, and otherwise maneuver, it must have at least 3G maneuver drive. Other ships will be unable to stand the strain, or sufficiently overcome local gravity. Small craft capable of 3G could also be used.

Explorers: The added strength required to move and function in greater than 1G is easily understood by most people, and it is formidable.

It is also manageable with sufficiently advanced technology. Technology easily overcomes the problem through the use of grav modules. Heavy duty grav modules

neutralize the pull of gravity, making it possible for an individual to function normally.

A standard grav belt is available at TL 12, costs Cr100,000, and can lift 200 kilograms against 1.5 gravities.

Local gravity for Komesh is approximately 3 Gs. Ordinary grav modules cannot handle this strain, and instead higher quality heavy duty grav modules must be procured.

The best source of heavy duty grav modules is an air/raft. An available air/raft can be cannibalized to provide four modules, or replacement parts can be bought from a supplier. Each module costs Cr110,000, weighs 30 kg, and can lift 200 kg against 2Gs. Using two modules mounted in a special grav belt harness (costing Cr2,000), a custom grav belt can be produced which allows an individual to operate in up to a 4G environment.

Individuals venturing out of a ship into the atmosphere of the gas giant must have a custom grav belt or they will not be able to function.

ATMOSPHERE

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Although the atmosphere of the gas giant is unbreathable, the various compounds which compose it pose little actual threat to explorations. Methane and ammonia will have little actual effect on a properly prepared protective suit.

Hydrogen: The major problem is hydrogen. Hydrogen is capable of permeating through many ordinary seals, especially when under great pressure. Small amounts of hydrogen mixed with oxygen within a suit create an explosive mixture which would be detonated by sparks from switches closing, static electricity, or even metal striking metal. Such an explosion could severely injure the suit occupant and rupture the suit; a ruptured suit is a sure way of dying.

Pressure: Deep in the planet's gravity well, atmospheric pressure reaches crushing levels. Ships and equipment pressure limits are given in the equipment limits tables.

Limited excursions out of a ship are possible using custom-procured protective suits. Available at tech level 13, each costs Cr20,000 and weighs 10 kilograms. It functions as cloth armor and vacc suit.

Equipment can withstand up to twice the stated pressure for a very short period. For each minute at the greater pressure, throw 10+ for the equipment to fail.

TEMPERATURE

The problem of temperature is not one of cold, but of heat. Although the outer fringes of the atmosphere are cold, temperature rapidly increases with decreasing altitude. Ship and equipment temperature limits are given in the equipment limits tables.

WEATHER

The turbulence of the gas giant's atmosphere is a result of temperature imbalances around the planet. Resulting winds reach up to 200 meters per second, and may be directed laterally or vertically. Seasonal variations in temperature and pressure may produce ammonia sleet or hail.

ATMOSPHERE CHARACTERISTICS

Altitude	titude Pressure		ude Pressure		np	Notes
38,000	vacuum		-	-		
37,000	trace	150°	К	clouds		
36,000	1	300°	к	clouds		
35,000	300	1,000°	К			
34,000	100,000	2,000°	К			
33,000	400,000	3,000°	к	liquid H ₂		

Altitude is measured from center of planet. Pressure is in atmospheres (1 = standard). Temperature is ${}^{\circ}K$.

ANCIENT SITE INITIAL ALTITUDE

Die Initial Altitude

- 1 33,000 km
- 2 34,000 km
- 3 35,000 km
- 4 36,000 km
- 5 37,000 km
- 6 38,000 km

Throw 1D for the initial altitude.

ANCIENT SITE ALTITUDE CHANGE

Throw 2D -7 times 100 once per 12 hours for altitude change in kilometers. DM -1 if altitude is above 35,000 km, DM +1 if altitude is below 35,000 km.

WIND

Wind varies in speed and turbulence. **Speed:** Throw 1D times 10 for initial wind speed in meters per second.

Turbulence: Throw 1D for turbulence: 1 or 2 equals steady; 3 or 4 equals gusting; 5 or 6 equals unpredictable.

Changes: Throw 9 + every three hours for wind condition to change. If yes, wind speed increases by 1D - 3 times 10 meters per second (DM - 3 if wind speed is already above 100 meters per second. Reroll for turbulence.

Effects: If wind is above 20 m/sec, throw 10 + once per quarter hour for it to carry an individual away. DM + 1 per 10 m/sec speed above 20 m/sec. DM -6 if a tie-down rope is used. DM + 1 if gusting. DM + 3 if unpredictable. SLEET

At any altitude between 36,500 and 34,000 km, water or ammonia may precipitate to form sleet. When between these altitudes and when the wind changes, throw 8 + for a sleet storm to begin. Sleet storms last for 1D hours and reduce vision to medium range.

Throw 10+ for sleet from a specific storm to hamper an individual: if local temperature is greater than 350° K, then it will start to overheat the suit (halving the time available to the user); if local temperature is less than 0° K, then it will freeze the joints (immobilizing the suit).

EQUIPMENT LIMITS

Equipment is subject to specific limits when in a gas giant environment.

Grav Modules: Two air/raft grav modules effectively negate local gravity of 3Gs. If one module fails, each action by a character expends one endurance point (regained by resting) and endurance or less must be thrown first, and the wearer drops at the rate of 15 meters per second per second. If both fail, the wearer is immobilized and drops at 30 meters per second per second.

Ships and Small Craft: A 3G maneuver drive is required before a vessel can enter the atmosphere below 37,000 km.

Commercial vessels (traders, merchants, liners) can withstand up to 1,000° K and up to 1,000 atmospheres.

Military vessels can handle temperatures to 1,500° K and pressures to 2,000 atmospheres. System defense boats are specifically constructed to handle temperatures to 2,500° K and

pressures to 3,000 atmospheres. Suits: Special protective suits fail at 1,000° K or 400 atmospheres.

Limit Effects: Once a ship reaches its limits, throw 10 + every quarter hour for it to fail under the heat or pressure, after which its drives stop and it falls.

THE ANCIENT SITE SIGNAL

The goal of the expedition into Komesh is the source of a signal which comes from deep in the atmosphere of the planet.

The exact location (to then be determined by the adventurers from their own instrumentation) is generated from the Ancient site initial altitude table. Throw 1D for the initial altitude.

The altitude of the site changes with time. Each local day (about 12 hours), throw 2D-7 times 100 for the change in altitude; DM + 1 if current altitude is below 35,000 km, DM - 1 if current altitude is above 35,000 km.

THE SEARCH

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Once the signal is located and appropriate equipment is secured, the expedition to the site begins.

Because of static in the atmosphere, misleading signals, and other problems, the expedition must throw 11 + (DM + navigation) to find an object. Throw once per eight hours of searching (and remember to take 8 hours sleep in 24).

Navigation Beacons: The first discovery should be a navigation beacon rather than the Ancient village. Located approximately 200 kilometers from the site, the beacon is a small rock (about 100 meters in diameter) fitted with a power plant, a maneuver drive, and a transmitter which produces a burst of static at irregular intervals.

The expedition can venture out of the ship to board the beacon and investigate it. The group will find very high technology solid-state equipment which is constantly monitoring local conditions and transmitting reports about them. Careful examination will allow someone to deduce that the reports are beamed in a specific direction (to the Ancient site), and the expedition can then set out toward the site.

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The Village

Deep in the atmosphere of Komesh is an intact Ancient site. Originally created by Grandfather Ancient as a research facility, it escaped destruction during the Final War for the simple reason that it was never discovered by Grandfather's enemies. It has drifted in Komesh's atmosphere for millenia, suspended against the gravity of the gas giant by a network of anti-gravity pylons on its undersurface, still pursuing whatever missions were inplanted in its computer controllers.

Altitude: The base (or village) is capable of changing altitude from time to time, and it does so at random intervals it, driven by computer instructions implanted when it was first created.

The altitude of the village is initially determined from the Ancient base initial altitude chart, and subsequent variations in the altitude are also determined from the charts.

First Contact: Even from a distance, the Ancient base is recognizable as an artificial construction. The illustration shows the base as it would first be seen by the adventurers. The group may take what precautions they feel necessary during the approach to the village. Weather in effect upon first sighting should be noted.

The village remains totally unreactive to the approach of the adventurers.

ANIMAL ENCOUNTERS

There is native life in the atmosphere of this gas giant. The local life cycle is hydrogen/carbon based and depends on heat from the lower reaches of the atmosphere as its energy source. Microscopic life from the depths is carried to higher levels by atmospheric currents where creatures higher in the food chain feed on them and are themselves eaten by others.

All life forms on Komesh are flyers of some form. Some are familiar winged forms, while others act more like kites, or dandelion seeds, or parachutes. There is no available research in library data files about life on Komesh, although available information does recognize life as possible in the atmospheres of gas giants.

Signs of Life: During the approach to the village, what appears to be a flock of birds breaks from one of the towers, turns, and flies into the distance. They are a local life form (flying 3kg intermittents) but their nature remains a mystery to the adventurers, who may see them as live beings, or may conjecture them to be robotic mechanisms from the village.

Animal Encounters: Aside from the first sight of the flying intermittents scattering from the village as the ship approaches, animal encounters can be expected from time to time near the village. Throw 10 + for an animal encounter once per hour; then throw 1D for animal type: 1-4 flying intermittent, 5-6 flying eater.

Encounters with these animals should use the following animal encounter data.

UPPER ATMOSPHERE Terrain	n		Gas Giant (10+)			
Die Qty Animal Type	Weight	Hits Armor	Wounds &	Weapons		
 — 16 Flying Intermittent 	3kg	4/3 none	7 blade	F5 A8 S3		
 — 1 Flying Eater 	12kg	9/8 none	9 teeth	A3 F8 S4		

APPROACHING THE VILLAGE

Once the village is sighted, the adventurers can move closer. Sensor and visual scans show it to be constructed on a disk about 300 meters in diameter. The underside holds the twisted anti-gravity pylons. The upper reaches are buildings.

Approaches: It is possible to approach the village from any direction. Approaches from below, however, will encounter extreme turbulence (from the anti-grav modules of the disk) making fine maneuvering of a ship or grav belt impossible.

Approaches from above bring individuals into the upper reaches of the structures on the disk.

Approaches to the edge of the disk take individuals to the equivalent of ground level with direct access to many of the streets, alleys, and doorways of the village. A ship can approach the disk, but there is insufficient room for one to touch down.

EXPLORATIONS

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The village can be broken into three basic areas: the disk surface, the pylon understructure, and the structures or buildings on the disk. Only the upper surface of the disk and the many buildings are accessible.

A large number of structures have been constructed on the disk. They have a variety of architectural styles and serve a variety of purposes.

Wandering through the small streets and divisions separating the buildings will reveals several of the buildings are sheathed in a mirror-like finish. Their reflections of the gas giant sky make it difficult to see their outlines or surfaces.

Whenever an individual approaches within 10 meters of one of these surfaces, the holographic image of a flying eater will appear. Although the image is harmless, it can be presented to the adventurers as an animal encounter (with surprise) until they determine that it is simply an image.

DISCOVERIES

The entire village appears to be deserted and empty. Rooms are bare, streets and alleys are empty. No mechanisms are present. Floors have been swept clean. Searching the village leads to one empty room after another. Almost.

There are three discoveries to be made in the village. In the course of a thorough search, throw 10 + once per fifteen minutes for each discovery to take place.

1. Certain antenna-like structures at the top of the village move over time. Instrumentation from the ship can be used to discover that they are transmitting radio. The signals appear to be data transmissions, but they are too complex to be deciphered.

Referee: These transmissions are communications between the village and the ship. They are routine, but serve to show that the village is functional.

2. A room located high in one of the towers has not been cleaned out; it remains full of a large quantity of "garbage" artifacts of passing interest, but of no real value. Throw 4D for the number of artifacts present. None of them are functioning, but they are worth approximately Cr10,000 each.

3. A capsule from the ship can be seen approaching the village, to disappear into the upper reaches of the village. An attempt to locate the capsule should be fruitless the first time (perhaps the adventurers find it again just as it is leaving the village). Four hours later, the approach of the next capsule can find the group better prepared.



A second capsule calls at the bare platform four hours later. It hovers there for several minutes, and then leaves. Any adventurer who approaches it will find an opening which allows him to enter. Once inside, the traveller has the opportunity to investigate its interior, seeing the structure and the two teleportation portals (non-functioning at the momen⁺' \fter five minutes, the opening closes and the capsule proceeds to the Ancient ship, carrying him to the Ancient ship.

THE MAP ROOM

One chamber in the village is a map room. The chamber is ellipsoidal and constructed of an off-white stone-like material. The room is divided into a main area and two smaller areas by partitions of vapor— which give the appearance of captive clouds. Lighting comes from a central bright source at the highest point of the ceiling.

The main area appears empty. Approaching any of the cloud walls shows them to be insubstantial, and they can be easily passed through.

Flat Maps: In one small section, four large flat panels hang in the air. Touches to an edge call up flat projections of world surfaces — maps. It is possible to call up a number of different maps, but all will be unrecognizable initially. Further experimentation will (after 1D hours) show that portions of the maps can be expanded, and close up views seen.

For each map called up, throw 2D for 12 +, and if successful, allow one character to recognize the map as being of a world he has seen before. From that point, characters can determine that the maps were created 300,000 years ago.

Star Maps: This small section centered on a pylon about one meter in height. At its tip is a sphere with several protrusions and some inlaid gold markings.

Touching the sphere causes the lights in the area to go out (although other parts of the map room are unaffected) and a three dimensional star-field to be projected.

The star field should be instantly familiar to everyone, and recognizable in detail to anyone with navigation-1 +. Anyone with navigation-2 + will also see an immediate discrepancy: there are three extra stars in the field. These stars are located in hexes 0507, 0606, and 0707 on the Regina subsector map.

Close examination of the star field projector will show that it can be manipulated to center the view on a single star, or to magnify the view of the star to show its planets. The limit of the projection is at a point where the planets are about 25 millimeters in diameter. At the same time, at that scale, a set of small glowing symbols hangs in the air near the planet— these symbols correspond to markings in the flat map room and can be used to call up flat maps of the same worlds.

An individual with navigation-3+ will see that the configurations of the star systems within the projection are current; they are consistent with the present locations of planets within their star systems. This presentation is possible because of computer updates/projections based on orbital data.

Of special interest is the Shionthy system and the three unknown stars. The Shionthy system on this map is not an asteroid belt, but instead a planet. The unknown stars fill areas now known as empty space.

Referee: Based on this evidence, it is logical to conclude (correctly) that Shionthy was converted to an asteroid belt during the Final War.

It is also logical to conclude that the three unknown stars were destroyed along with their systems in the Final War. That is, however, incorrect; they were pinched off into Grandfather's pocket universe.

Regina Subsector

The Regina subsector is a diverse and developing subsector on the very fringes of the Imperium with an intriguing blend of settled and frontier worlds.

Name	Hex	UPP			Remarks			
Efate	0105	A646930	D	В	Industrial.			
Alell	0106	B46789C	A		Rich.			
Yres	0202	BAC6773	7				G	
Menorb	0203	C652998	7		Poor.			
Uakye	0205	B439598	D		Non-industrial.			
Whanga	0206	E676126	7		Non-industrial.		G	
Knorbes	0207	E888787	2		Rich. Agricultural.		G	
Forboldn	0208	E893614	4		Non-industrial.		G	
Ruie	0209	C776977	7		Industrial.	А	G	
Jenghe	0210	C799663	9	S	Non-industrial. Owned by Regina.		G	
Pixie	0303	A100103	D	Ν	Non-industrial. Vacuum World.			
Boughene	0304	A8B3531	D	S	Non-industrial.		G	
Hefry	0309	C200423	7	S	Non-industrial. Vacuum World.			
Regina	0310	A788899	А	А	Rich. Subsector Capital.		G	
Feri	0405	B384879	В	S	Rich.			
Roup	0407	C77A9A9	6	S	Industrial. Water World.	А	G	
Pscias	0506	X355423	1		Non-industrial.	R	G	
Yori	0510	C360757	D		Rich. Desert World. Research Station	1.	G	
Dentus	0601	C979500	А	S	Non-industrial.			
Kinorb	0602	A663659	5		Rich. Non-industrial.		G	
Beck's World	0604	D88349D	4		Non-industrial.		G	
Enope	0605	C411988	6		Non-agricultural. Industrial.			
Wochiers	0607	EAC28CC	9				G	
Yorbund	0703	C7C6503	7		Non-industrial.			
Shionthy	0706	X000742	1.11		Non-agricultural. Asteroid Belt.	R	G	
Algine	0708	X766977	4			R	G	
Yurst	0709	E7B4643	100		Non-industrial.		G	
Heya	0802	B687745	5		Rich. Agricultural.		G	
Keng	0805	E2718CA	3				G	
Moughas	0806	CA5A588			Non-industrial. Water World.		G	
Rethe	0808	E230AA8			Poor. Non-agricultural. Desert World.		G	
Inthe	0810	B575776	9	А	Agricultural.		G	

The Regina subsector contains 32 worlds with a total population of 60.1 billion. The highest population is 26 billion, at Rethe; the highest tech level is D, at Efate, Uakye, Pixie, Boughene, and Yori. All worlds in the subsector with the exception of Ruie are members of the Imperium.

Base Codes: N- Naval Base. S- Scout Base. A- Both Naval and Scout Base.



The Ship

Floating in the atmosphere near the Ancient village is a ship; one which has lingered nearby since the end of the Final War, waiting to complete its mission. Its semiintelligent computer suffered a mild memory loss as the result of a freak stellar flare, and as a result the ship has been stranded near the village, constantly sending small capsules into it in hopes of finding passengers.

This Ancient ship was one of several which Grandfather had had constructed to assist in his researches, and later in his war against his children. The ship had been programmed to call at several locations throughout the Spinward Marches and this particular Ancient base was the last one on its list.

The distance from the ship to the base varies, although it follows a fairly regular cycle. It will drift closer to the base approximately once very 36 hours, moving to within 100 meters and remaining for about an hour. The ship then drifts off to a distance of about one hundred kilometers before returning to the base.

Individual capsules from the ship visit the base on a more frequent schedule, with one arriving at the base every four hours, remaining for just a few minutes, and then returning to the ship.

SHIP DESCRIPTION

The Ancient ship is an extremely large vessel originally constructed as an exploration ship by Grandfather himself. The performance characteristics of this ship are literally fantastic: it is built around a teleportation network which allows instant access from one part of the ship to another, and it uses this teleportation network to greatly increase its capabilities and range.

This ship could not be built with Imperial technology. The following description presents its capabilities in standard terms.

Ancient Exploration Ship: The ship is built around a lattice-work hull of approximately 200 tons displacement. It mounts drives capable of jump-6 and 6G acceleration. There are no fuel tanks and the ship operates without refuelling. The hull has forty-three *capsules* (each about six tons) mounted on the hull, of which all but one can be detached and maneuvered independently. The one solidly-mounted capsule is the *prime* capsule and holds input/output terminals for the main ship's computer (which is the equivalent of a Model/9, and is semi-intelligent). The remaining fortytwo capsules are fitted for a variety of functions including use as staterooms, storage, library, and maintenance areas. Each capsule is capable of detaching itself from the main ship and maneuvering independently. The hull is not streamlined in appearance, but is streamlined in performance, and the ship can enter atmosphere.

The ship requires no crew. Its cost and building time are unimagineable.

THE HULL

The hull of the ship serves as a frame for the various capsules to attach themselves. Conduits and cables within the lattice connect the capsules to the main ship com-



puter for control and sensor information, as well as for power and life support connections.

The Prime Capsule: One capsule is permanently attached to the frame and houses the main computer input/output terminals and the main ship controls. This capsule has only one teleportation portal and it is slightly larger than the others. It serves as the bridge for the ship. The semi-intelligent computer is contained in the walls of this capsule.

Drives: The hull also contains the ship's drives (power plant, jump and maneuver drives). These drives are inaccessible from the capsules, and are integral with the hull structure. There are no fuel tanks, fuel being fed through teleportation portals from the ship's pocket universe as needed.

THE CAPSULES

The detachable capsules are each small, independent hulls. Each capsule mounts its own small power plant and maneuver drive (drawing fuel from the pocket universe) and is capable of 6G acceleration. It has its own internal controls and can be operated by one person.

Each capsule has two teleportation portals inside it. Entering a capsule is possible by teleporting in from another capsule. It is also possible to enter a capsule from outside; a control on the outer surface of the capsule causes the wall to temporarily melt, forming a hole large enough to enter through. After entry, the melted wall reforms, recreating the original wall.

Controls: Controls within the capsule can perform the following functions: render walls transparent, render walls opaque, maneuver, attach to main hull, and direct teleportation portal to specific destination.

The teleportation portals can be manipulated by controls within each capsule, or from central controls in the computer at the prime portal.

The teleportation portals will not transmit electromagnetic radiation, and thus are opaque to radio and light. Consequently, capsules connect to a network of cables and optical fibres when attached to the latticework hull, and control impulses travel through those cables.

When a capsule is detached from the hull, then control impulses must be sent through the teleportation portals — mechanically. Near each portal is an articulated arm which can swivel away from the portal when not in use, or be inserted into the portal for transmission of mechanical pulses. The arm matches with another arm at the receiving portal, and a two way information exchange can take place. These mechanical arms are able to provide the master computer with data and sensor readings, and to receive maneuver control pulses which will steer the capsule on its course.

The mechanical arms also provide the pulses which address a portal to any other specific portal within the network.

The Portals: Each of the portals in the ship is circular and roughly two meters in diameter. When turned off, or inoperative, the panel is steel-grey; when operating, it is a shimmering-white.

Portals are randomly addressed to other portals if not otherwise controlled. The mechanical arm has a series of telltale lights on it which identifies the portal it is connected to; the lights show in binary notation (reading from right to left) the number of the capsule being addressed. A zero means that the light is off; a one

means that the light is on. The rightmost place is ones; the second is twos; the third is fours; the fourth is eights; the fifth is sixteens; the sixth is thirty-twos. For example, reading 101010 from right to left, the number shows zero ones, one two, zero fours, one eight, zero sixteens, and one thirty-two; the reading represents 2+8+32=42.

If a player chooses to pay attention to the light pattern it can be used to tell where a portal is currently addressed (after a suitable length of time).

Portals are controlled by a small series of pressure sensitive points or buttons located on the rim of the device. There are seven buttons in a row, with the left-most button somewhat larger than the others. To operate a portal, an individual presses (or doesn't press) the smaller buttons to indicate the destination portal in binary form (pressing a button makes it a one; not pressing makes it a zero), and then pressing the larger, leftmost button twice. If no buttons have been pressed, and then the larger button is pressed just once, the portal is addressed randomly to another portal in the system.

Portals can be disconnected from the ship while retaining their teleportation abilities. Each portal (except the prime portal) is connected to the wall of a capsule only loosely by simple clamps. The portals themselves have no specific power or computer connections and can easily be transported independently of the capsule.

Portals are durable, well-constructed devices which can survive ordinary handling with ease. Each weighs about five kilograms, and can be activated in any position.

Portals are vulnerable to high temperatures, acid, or physical damage, and if the metal frame is destroyed, the portal is destroyed. In addition, any portal which is taken more than 35 light minutes from the prime portal will become inactive and will not function; it can be reset by teleporting it through the prime portal, but this fact is not available to the player characters except through experimentation.

MAPPING THE SHIP

Explorations of the Ancient ship are a natural consequence of boarding it. As explorations begin, mapping by the player-characters should also begin.

The referee must produce a simple map of the ship. There are 43 capsules which make up the ship: 42 standard capsules and one prime capsule. There are no connections between the capsules except for teleportation portals.

A map is produced by drawing 43 circles on a sheet of paper and numbering them 1 to 43. Each circle is a capsule and is approximately 3 meters in diameter.

Portal Usage: The first capsule entered is randomly numbered from 3 to 43; throw 8D - 5 for the number of the capsule.

Initially, the portals function randomly, connecting with other capsules on a random basis. In each capsule, throw 2D - 7 and add this number to the current capsule number. For example, in capsule 30, throw 2D (for 11) -7, giving a result of 4, and add this to 30: the capsule teleported to is capsule 34. Next throw 2D (for 2) -7, giving a result of -5, and add this to 34: the capsule teleported to is 29. If a capsule destination is greater than 43, then subtract 43 from the number; if the destination is less than 1 then add 43 to the number. A modified die roll result of 0 teleports someone back into the same capsule.

Capsule number 1 is the prime capsule.

ACTIONS OF THE SHIP

The ship is semi-intelligent, and was sent on a mission to the village late in

the Final War. It's memory fault is partially corrected when it finally has passengers to carry; a condition fulfilled by the arrival of the adventurers in capsule 1.

First Reactions: The initial reactions of the ship's computer are hospitality. It is prepared to recognize any beings on board as rightfully there, and to extend proper hospitality to them. As a result, the computer will make sure that capsules have proper atmosphere, pressure, and light for the player characters. Then, the portal will be directed to a dining capsule where meals are made available.

The Computer: The computer cannot communicate in anglic, and the controls on the bridge are not marked in any clear manner. Nevertheless, it is possible to puzzle out some of the basic controls for the ship after a decent interval. In each hour spent puzzling out the basic operation of the controls, throw 10 +, and each time the throw is successful, award (secretly) the players one point. When the total is six points, indicate that the basic controls are at least partially understood.

The controls are essentially automatic. Some maneuver commands can be given, but any operation into space, or into jump, requires a course to be specified. That course is contained on a navigation spindle in a combination of physical contours and magnetic charges. There are no navigation spindles on the ship that can be found, but the slot which accepts then is visible on a console in the prime capsule.

When the slot is examined, someone can see that it will accept the small statue that Trow Backett inherited from his uncle.

Off Into Space: The statuette is indeed a navigation spindle, and it immediately provides a course to the ship once it is inserted into the proper slot. (If Backett has not brough along his statuette, then an intense search can finally locate one). Once this occurs, the ship begins to maneuver and any unattached capsules return to their berths. The adventurers have approximately ten minutes before the ship leaves, and when it does, it accelerates straight up out of the atmosphere.

Once safely out of Komesh's gravity well, the ship begins a jump. On the bridge, it is possible (throw 9 + per fifteen minutes until successful) to activate a navigation screen which shows the ship's destination— which is hex 0606 on the Regina subsector map.

IN DEEP SPACE

After a week in jump space, the ship pops out in deep space far from any stars. It then begins a slow approach toward a large metal disk which is recognizable as a very large portal. Once several kilometers away from it, the ship stops, and sends out a single capsule. That capsule approaches the portal, briefly touches it (exchanging some sort of information) and then returns to its place in the ships hull.

The ship then begins moving again, and as it approaches, the portal color changes to indicate that it has been activated. Then the ship passes through.

The Pocket Universe

The universe in which we all live is formed from a sort of fabric, usually flat in the spaces between the stars, but bunched up and wrinked by mass and gravity near planets and suns.

Sometimes, it is possible to pinch off a part of the universe, physically separating the underlying fabric from the rest of the universe. Such a place is a pocket universe: complete unto itself, independent of our own universe, isolated from us.

Grandfather lives in such a place. His pocket universe, which he created more than 300,000 years ago, is large by most standards, reaching almost 3 parsecs across, and containing three separate star systems.

Its Creation: Grandfather created his pocket universe by expending a great deal of energy (both personal and fusion) to rip the fabric of space and close it off from the rest of the universe.

Earlier projects in the creation of pocket universes for production of teleportation networks and starships had given Grandfather the expertise he needed for this task. His experimental work had shown him techniques and methods that allowed him to produce the pocket universe. The techniques are long and difficult, and require extensive manipulation of gravity in order to rip the fabric of space. Experience had shown Grandfather that creation of small pocket universes took several years of work; the large pocket universe he finally made took almost one hundred years to produce, and that did not include time for improvements to the worlds within it.

Grandfather's creation was the largest pocket universe he had ever attempted, and it exceeded his previous pocket universes by a factor of more than 100,000; earlier pocket universes were hardly larger than a star system, while this one was several parsecs across.

POCKET ASTROGRAPHY

This pocket universe contains three star systems arranged in a triangular configuration. Each system is about one parsec from the others.

. The boundary of the pocket universe is about one parsec beyond the systems, giving it a total diameter of slightly more than three parsecs.

A Closed System: The pocket universe is a closed universe: it folds back onto itself. Reaching the edge of the pocket universe is impossible; a course is bent back onto itself and the travellers' ship just seems to come back into the pocket universe from the other direction.

Because of this closed system effect, light is also constantly returning to the three star systems. Wherever someone looks, the light from the three stars is returning. As a result, space is not black, but glows with the light of 300,000 years of starglow. Because this light is returning from every direction, there are no distinct star images in the sky, only a glow. The skyglow is enough to cut the black of space, but not quite bright enough to read by. As time passes, this light will grow brighter and brighter and as the stars grow dimmer and die, space will become an even light source from all directions.

Physical Laws: The laws of physics, chemistry, and all the sciences continue in force in this pocket universe. Whatever could or does happen in our own universe also happens for the same reasons in the pocket universe.

THE THREE SYSTEMS

The pocket universe has three systems, each of which Grandfather choose for a specific reason.

Grandfather's System: Early in his life, Grandfather selected a star system as a base for his activities, and this system became the core of his pocket universe. Of the several planets within the system, the main one is physically nearly identical to the Droyne homeworld and has been has been seeded with animals and plants from the homeworld as well.

Other worlds in the system serve as industrial complexes, research laboratories, sources of minerals and rarities, and storehouses.

The Droyne System: One star system has been reserved for the Droyne. The faction which stood by Grandfather during the Final War was taken along and given an entire star system for their own use.

They are restricted to that system, and Grandfather does not allow them jump drives. On their own, they have adopted an easy-going pastoral life devoted to comfort and the pursuit of happiness— which for them involves the continuity of their community, the raising of food and the production of materials to meet their needs, and little else.

Grandfather has kept this group of Droyne in his pocket universe as a hedge against the future. They are conditioned to respect and revere him. They obey his orders without question. And at some time in the future, should Grandfather need Droyne for breeding purposes, experimentation, colonization, or even as soldiers, he as a supply available.

The Vacant System: Grandfather, in preparing for the future, has set aside one of his star systems for future expansion. Without having specific plans, Grandfather felt that someday he might need more worlds, an extra star, some gas giants, and whatever else is in a star system. In creating the pocket universe, he simply drew its boundary wide enough to encompass this star system as well.

ACCESS TO THE POCKET UNIVERSE

When Grandfather created the pocket universe, he established several portals to allow access between it and our universe. Some allowed transport of equipment and resources to his now home, others allowed him to travel between the universes on his various projects.

In the first 250,000 years after the creation of the pocket universe, Grandfather made regular trips out. He visited many former Droyne worlds ravaged or destroyed by the Final War. Where destruction of their technological base was not complete, he finished the job.

At the same time, he found small surviving Droyne settlements which had no memory of the war except for some vague legends. These twenty worlds he interfered with in subtle ways. He found that without help, the Droyne lost their castesystem, so he instituted the system of coyns— small coin-like disks which helped in deciding Droyne caste assignments when children came of age. He continued to refine these coyns in light of what he found in his studies; over time, they came to show various races (Aslan, Hiver, K'kree) which did not even exist when Droyne ranged the stars.

Sometimes he found developing races and hindered or helped them according to his own whim. Other times, he extrapolated trends and saw future expansions that ultimately would bring some of those races to the site of his pocket universe.

Retreat: Grandfather say that eventual expansion of the space-faring races would bring them to the site of his pocket universe, and not wanting interference from them, he started closing off the access portals, leaving only a very few open for occasional sojourns back into the larger universe.

The original portals were all in the Regina subsector, and mapped a one-to-one correspondence with the pocket universe. They served as entry/exit portals, and were never utilized as teleportation portals. As a result, they could be scattered across several parsecs.

Expeditions: Grandfather left one portal at Algine open for millenia. From that portal, he would occasionally venture forth into the universe— in search of some mineral or data he needed. Sometimes he would send a robot-crewed ship out on an expedition to a far-off world or star in search of some arcane knowledge.

When that world was colonized by humans, he closed that portal, and shut himself off from the universe.

The Forgotten Portal: But Grandfather entrusted much of the responsibility for running his pocket universe to his robots, and they occasionally made decisions without consulting (or bothering) him. One of those decisions resulted in a portal in deep space in the center of hex 0606— corresponding to the epicenter of the pocket universe.

The portal is inoperative – merely a large disk of grey metal floating in deep space. Triggered by the proper signal, it opens to the pocket universe.

It is through this portal that the Ancient ship travels, carrying the adventurers.

GRANDFATHER'S HELPERS

Grandfather has created robotic assistants to help him in his projects, no longer trusting the performance of his children or other Droyne. These robotic helpers car be roughly divided into three types: Droyne-like beings, recognizable robots, anc intelligent machines.

Droyne-like beings are biological constructs which might be considered androids by humans, with the exception that they are similar in form to Droyne rather than to humans. The beings, however, are superior to Droyne physically and mentally As a rough approximation, each can be treated as being FFFBBB: sufficient to resis most attacks and to react intelligently to any problems.

Recognizable robots are purely mechanical devices which have intelligent computer brains and an appropriate number of manipulators to allow them to perforr whatever functions they are assigned. Some will be Droyne-like in form, while other may have a strange number of arms, grav modules instead of legs, and may or ma not have a recognizable head.

Intelligent machines are tools or devices which have been constructed to contr themselves. Grandfather has made great use of such machines in the constructic of bases, buildings, and factories.

Referee: As the adventurers move through the pocket universe, they should t constantly encountering intelligent machines, robots, or androids. The local being are unprepared to interfere with the adventurers, simply because they have no i structions which say the adventurers are intruders. The adventurers can be assisted

in most of their explorations as long as they cause no destruction and do not interfere with local activities.

INITIAL EXPLORATIONS

The Ancient ship is fulfilling its own mission in entering the pocket universe, so it proceeds directly to Grandfather's System. To do so, it must jump, and the jump begins within ten minutes of passing through the portal.

After a week in jump space, the ship then emerges in Grandfather's System and maneuvers directly toward an industrial complex on a barren world (A700???-?). Once there, it unloads several capsules into the hands of waiting robots. Its task finished, the ship closes down and goes into a dormant mode.

The Starport: Exploring the starport can begin immediately. Local robots will not harass the adventurers as long as they are not engaged in destructive activities. Some souvenir taking is possible.

The starport extends for hundreds of kilometers on the surface of this planet. At intervals of about ten kilometers, groups of several buildings emerge from the paved starport surface; some buildings are warehouses, others are repair and maintenance facilities, and others appear to have no function: large enclosed auditoriums without seats, crazily tilted towers, horizontal slabs of stone held hundreds of meters in the air by anti-grav modules.

Referee: This starport was once involved in extensive operations, but now leads a rather sedate life, with few ships calling or leaving.

Extensive searching will find-

Hundreds of ships of many diverse types (although none are based on teleport networks). All are constructed at tech level 25 or greater and are capable of jump-6 and maneuver-6. They can be operated with ease (due to their simple controls) by anyone with pilot or ship's boat skill.

Caches of artifacts, many in protective wrappings or packaging. All appear to be magical in their effects – their technology is so high as to be incomprehensible or unbelievable to the adventurers.

The Capture: After a suitable period of exploration (and without warning), the adventurers find themselves completely immobilized. Only after this happens, a large group of Droyne-like beings gather and transfer them to a ship which immediately lifts off for Grandfather's World (the next one in toward the star).

ENCOUNTER WITH GRANDFATHER

Upon arrival at Grandfather's World, the group is taken to a great hall (the ceiling is extends for kilometers, and is held up by grav modules). There, they are set down and the immobilizing force which holds them is released. They soon find, however, that no one can move more than twenty meters from the spot they were initially placed.

When Grandfather finally arrives he realizes instantly who the adventures are and how they arrived in his pocket universe (he is a super-genius). After a short period where he chatters at them and records any responses the make, a Droyne-like being steps forward and speaks in perfect Anglic (vast computer networks have been called on to produce translations between Grandfather and the group; this being is the interpreter). Speaking for Grandfather (who wanders away after a short period), the being explains the secret of the Ancients, warns that the portal which they found must now be closed, and decides that they can be returned to the larger universe before the portal is closed.

A capsule from the Ancient ship floats forward to allow the group to board and then rejoins the main ship. Immediately jumping, it proceeds to the portal and passes through.

The ship is now capable of speaking Anglic, and discusses its instructions with the group— it is to self-destruct once it reaches the village at Komesh, taking the village with it. Grandfather does not want his gas giant base to fall into the wrong hands.

Referee: The adventure is almost at an end. The ship and the village cannot be allowed to survive because in game terms they are too powerful. In the last minutes before the ship destroys itself, it is possible for the adventurers to remove and take with them some of the teleportation portals. Each chartacter may remove and take one portal each time he or she throws 5 + . Once the character throws 4 - . he or she may not take any more portals. It is recommended that each character receive at least two portals. One of the portals must be the prime portal or none of them will work once the ship self-destructs.

Further adventures can involve a wide variety of activities using these portals, including the possibility of an expedition to the world in these portal's small pocket universe.



Artifacts and Ancient Sites

The debris which remains from the Ancient's civilization is scattered about across parsecs of space. When a piece of that civilization is found, it has value to anyone trying to piece together the answer to the puzzle of the Ancients.

ARTIFACTS

The individual pieces are *artifacts*; manufactured items which were used by the Ancients in some aspect of their civilization. Artifact is the commonly applied term.

Artifacts come in all types and sizes. The vast majority are garbage; some broken devices which tantalizingly promise higher technology; a very few artifacts are working devices which can be used and sometimes even understood.

The garbage artifacts are the ones most people find. They are strewn about Ancient sites destroyed in their cataclysmic Final War; they are rubble. But even this rubble is fascinating! Shimmering pieces of broken brick; pearlescent plates of transparent glass—hard as diamond, but melting castable; simple metal containers—except the metal is titanium! or sometimes cobalt.

Broken devices are rarer by a factor of a thousand. Excavations of Ancient sites occasionally stumble onto relatively complete devices.

Rarer than broken devices are working devices. Very occasionally, one of the broken devices isn't: it works. Often the challenge to the excavators and the researchers is to determine not how it works, but what it does.

The havoc produced by the Final War destroyed every settlement, every ship, every structure the Ancients built. No one has ever found an Ancient ship or city which has survived. Partly for this reason, some have theorized that the Ancients abandoned this area of space, leaving (fleeing, migrating, wandering, exploring) for a new territory, and destroying all that was left behind.

The ultimate find then, the once-in-a-lifetime discovery, is an untouched Ancient vessel or city.

Traffic in Ancient Artifacts: The Imperium has an extreme interest in artifacts; its researches into the technology they represent is considerably enhanced by an analysis of every available artifact.

In order to analyze every artifact, the Imperium has strict laws controlling traffic in artifacts. Artifacts cannot be legally sold unless registered with the Imperium. The process of registration allows the Imperial authorities to analyze each item; rubble is registered and allowed, while more interesting items are confiscated and kept for deeper analysis.

As a result, there is an illicit traffic in artifacts. Any artifact besides a piece of rubble can usually be sold for more money in the illegal market than it can to the Imperium.

IMPERIAL INTEREST

The Imperium has always taken a deep interest in Ancient artifacts. **Imperial Researches:** Ancient sites within the Imperium fall under the domain of

the Imperial Interstellar Scout Service. Under the control of the scouts, these sites are excavated and researched under carefully controlled conditions.

After an initial evaluation, occasional sites (those which seem otherwise innocuous) are made available to the academic community. Much of what is known about the Ancients has come from research at these sites. Major universities compete for an opportunity to research an Ancient site.

Within the Regina subsector, two known Ancient sites are researched under the auspices of the University of Regina.

Discovery Bonuses: The Imperium has long searched for Ancient sites, but it has never been able to find them all. Aware of this, the Imperium has established a series of incentive bonuses designed to encourage the reporting of newly located Ancient sites to the authorities.

A payment of Cr50,000 is made for reporting a previously unknown Ancient site to the authorities.

A subsequent bonus of between Cr100 and Cr1,000,000 is made depending on an analysis of the site in depth.

KNOWN SITES

Within the Regina subsector, there are six known Ancient sites.

University of Regina: Two of the earliest Ancient sites discovered in the subsector are now excavated and researched by scholars from the University of Regina.

A small site on Yori was originally found buried under drifting sands in a vast desert surrounded by signs of destruction from the Final War. The site itself is characterized by iridescent white building blocks and occasional deep rubble-filled wells.

A somewhat larger site on Beck's World is a collapsed warren of interlocking caverns only partially excavated.

Imperial Sites: The Imperial Scout Service administers three sites in the subsector, but only one is publicly acknowledged.

The admitted site is located on Efate. Discovered in 354, it has long since been stripped of any useful items, and is now operated as an historic site. Restorations of the site show a gridwork of thousands of walls spaced about two meters apart and punctuated by extremely massive bulwarks at random intervals.

The site on Pixie is located on the edge of a vacuum plain under the shadow of a range of moutains. It is a flat irregular area meticulously inlaid with a mosaic of multi-colored anodized aluminum bars. There is no sign of the purpose of this site. This site is not public, and is protected by numerous security devices.

The Scout Service also administers a site on Inthe. Large artificial mounds of earth, tens of kilometers in length, are scattered over a thousand square kilometers, but analysis and excavation has given no clue as to their purpose. A large volcanic crater (now water filled) lies on the plain in the center of the mounds and may have been the site of the Ancient base.

Naval Site: The Imperial Navy administers a site on Knorbes. Elaborate precautions have been taken to conceal the fact that a site even exists, while similarly elaborate security measures trap and detain intruders.

The Navy has made this site a major excavation project; the Ancient base was originally destroyed when a massive attack cratered the area and then toppled mountains into the craters. In the thousands of years since, erosion has uncovered the ruined brick and mortar buildings of the site. Of especial interest is the large cache of black globe force field generators discovered here.

Teleportation

One area of technology which the Ancients have mastered is teleportation: the transmission of matter across large distances.

BASIC CONCEPTS

Teleportation can be achieved either psionically or technologically. Psionic teleportation is the easiest to achieve, precisely because it is non-technological. It is like walking, or thinking: once learned, it is easy to reproduce. Technological teleportation is much more difficult.

There are three basic ways in which technological teleportation can be achieved: transmission as energy, transmission as a signal, and what can best be called circumvention.

Transmission as Energy: When teleportation is achieved by transmission as energy, the matter to be transmitted is first totally converted to energy, and that energy is then sent to a receiver where it is converted back into matter.

The first drawback to this form of teleportation is contained in the equation $E = MC^2$: a very large amount of energy is contained in a very small amount of matter.

Assuming that energy transmission teleportation were achieved, the energy would flow from transmitter to receiver in an enormously powerful stream, probably in a type of laser beam. If the beam missed the receiver, it would be terribly destructive, the equivalent of megatons of explosive.

In addition, any energy which did not reach the receiver would be lost as matter during the reconstruction of the object. If 95% of the energy reached the receiver, only 95% of the object would be reconstructed: 95% of a human might simply be shorter, or mass less, or be without a liver, or a head.

Transmission as Signal: Teleportation using a signal is similar to communication by radio or television. The object to be transmitted is scanned and converted into information (a signal) which is then transmitted to a receiver where it is reformed into a material object.

Signal teleportation involves the total destruction of the object during the scanning process. A living object is actually killed when scanned; only a record of its existence remains in the signal. A totally new version of the object is created when the signal is received.

The major problem with signal teleportation is the potential for loss of signal. If anything should interfere with the signal (static, momentary obstruction, jamming) the object either cannot be reconstructed or is reconstructed unfaithfully.

Signal teleportation also calls for a supply of matter to be used at the receiver to build the object according to the recieved signal. Matter vaporized during the scanning process at the transmitter is usually recovered and saved for use in constructing objects when signals are received.

Signal teleportation technology can be used as a three dimensional duplicator. Throw a complex electronic computer, or just a rifle, into the teleport booth and scan it, recording the signal. Then play the signal back any number of times, each time creating an identical duplicate of the original. People can be duplicated too, creating all kinds of complications.

Reconstruction of the signal in matter requires a supply of matter at the receiver; because the exact types of matter to be reconstructed cannot be completely predicted, the receiver either needs an almost infinite supply of an infinite variety of elements and compounds, or it must be able to produce them on demand. That means that the signal teleport receiver must be able to produce any compound upon receiving its specifications and a supply of the elements it contains: diamonds from coal, computer chips from sand, human blood from water and a few common elements. Especially good signal teleport systems would be able to transmute any element to any other: gold from lead, uranium from hydrogen.

Circumvention: The third basic method of teleportation is circumvention; it involves *circumventing* or taking a short cut around the distance to be covered. It is like cutting a hole in a wall and stepping through rather than walking around to the door.

Circumvention involves pocket universes: small universes which are independent of our own universe, but which can be accessed by doorways or portals which stress space and allow the two universes to touch. The pocket universe is the hole in the wall that allows the intervening distance to be travelled. The portal into the pocket universe is mated with another portal from that same pocket universe back into our own universe. If two portals are placed opposite each other, a person can step through both at once, never sensing that the short trip involved passing through a pocket universe.

Circumvention neatly bypasses the problems of energy transmission teleportation and signal teleportation. No energy or signal passes from the transmitter to the receiver. There is no need for a supply of matter, or for the ability to create compounds or transmute elements. Because the matter teleported actually travels a shorter distance, it is not limited by the speed of light in this universe, and appears to be instantaneous in its effects.

Circumvention, however, still must cope with a basic law of this universe: conservation of energy. For any object, velocity is retained: something orbiting the Earth has a speed in excess of 4 kps, and if teleported down to the surface would immediately go skipping off toward the horizon. Something moving deeper into a gravity well gains energy and heats up; if moving out of a gravity well, it loses energy and cools down.

If teleportation is to be practical, it needs to overcome this restriction. Conceivably, the effects of inertia, velocity, and potential energy could be edited out of energy and signal teleportation. In circumvention, another method is required— it can be handled through the use of an energy sink.

An energy sink is a large mass to which excess energy can be sent, or from which energy can be taken to make up a lack. Several hundred tons is sufficient, but the more mass available, the better.

ANCIENT TELEPORTATION TECHNOLOGY

The Ancients achieved teleportation using the circumvention method. The typical Ancient teleportation network is a system of several (between 10 and 60) pairs of portals based on a pocket universe. The network is used as a switching system which allows each portal access to each other portal.

Ancient teleportation networks are independent; each is based on its own pocket

universe. Typically, a portion of the universe containing a star system is pinched off and a portal generator is installed within it. One of the worlds within serves as the energy sink; a core tap on the planet or an energy tap on the star serves to power the entire system. The portal generator and the computer which controls it must be located at the center of the pocket universe.

The computer manipulates the portals to be opposite each other; when two portals are opposite, matter can pass through. The computer and its associated mechanisms can switch portals to other mates in fractions of a second, and all portals can be paired simultaneously.

Portals: Portals are produced in a variety of sizes and shapes. In general, there are three sizes: personal, cargo, and ship.

Personal portals are about 2 meters in diameter. Cargo portals are about 10 meters in diameter. Ship portals are about 200 meters in diameter. In all cases, a prime portal is sliightly larger.

Portals are constructed on a titanium alloy base. They are rigid, and become permanently inoperable damaged. They are, however, powered from the pocket universe, making them portable and independent of local power sources.

Range: The nature of the pocket universe which is the basis for the teleportation network determines the range of the network. Factors such as mass and energy of the system, size of the pocket universe, and energy transmission rates all influence the effective range of the network. The maximum range for teleportation using any pocket universe is approximately 72 light minutes, but such a distance is possible only under special circumstances; the practical limit is thirty-six light minutes; beyond that range, portals disconnect from the system and become inoperable.

The reason for this phenomenon is the the *prime* portal. The center of the pocket universe is firmly "attached" to one portal: the prime portal. In effect, the pocket universe follows this prime portal around. Other portals compute their range from it. If a portal is taken more than 36 light-minutes from the prime it disconnects from the system and becomes inoperable. If the prime is taken more than 36 light minutes from another portal, the other portal disconnects.

The prime portal is slightly larger than the other portals, and this is for a purpose: disconnected portals can be *reset* and made operable again by passing them through the prime portal.

Because portals beyond 36 light-minutes from the prime disconnect, most users restrict themselves to that distance. If two portals are each 36 light-minutes from the prime portal, then it is possible to teleport up to 72 light minutes — but the the prime portal must be positioned midway between them.

Energy Equalization: The energy sink contained in an Ancient teleport network automatically determines energy levels at the site of each portal and alters the energy of any objects passing through a portal to match that of the receiving portal.

Gravity potential is equalized. Velocity is reduced to a negligible level (usually less than 100 meters per second).

Restrictions: Portals will not allow teleport into a ship which is in jump space. Portals will not function between pocket universes. If a portal from one network passes through a portal from another network, it becomes disconnected.

Portals do not equalize pressure between the two sides: vacuum, high pressure, or other conditions must be dealt with by the teleportees.

Velocity reduction effects slow everything which is travelling at greater than 100

meters per second to that speed. As a result, light cannot pass through a portal: instead an operating portal appears shiny rather than dull.

Electronics connections are also severed by a portal. Wire connections simply cease to function.

Velocity reduction effects also slow bullets passing through a portal. As a result, firearms shooting through a portal are reduced to medium range beyond the portal, and damage is reduced to 1D. Firing through a portal is effectively useless anyway as there is no way to aim into one.

TECHNOLOGICAL RAMIFICATIONS

The technology used to create the Ancient teleport networks comes from a variety of tech levels. Creation of portals to pocket universes is about TL 25. The actual pinching off of pocket universes is closer to TL 35.

Some natural ramifications of this technology have been exploited by the Ancients as well. Two specific developments are planet-busters and matter storage.

Planet-Busters: If the energy sink system is disconnected, then there is nothing to regulate the velocity of an object passing through portals. Any mass in a gravity field of a planet will be accelerated toward the planet. After a drop of some distance, it enters a portal, is teleported back to its original position, where it continued to fall toward the planet.

Constant acceleration at 1G (or whatever the planet has) eventually brings the object close to the speed of light. At .999 light-speed, the object's mass is also increased. When it has reaced a suitable mass and speed, the object is then teleported to the planet's surface. The resulting collision is devastating to the planet. It is enough to reduce it to an asteroid belt.

Extreme safeguards are built into a teleport network to prevent its use in this manner; it is effectively impossible to convert a teleport network into a planet buster.

Matter Storage: The fact that a pocket universe is connected to the portals produces some interesting situations.

The portals allow access to other points in our universe, but also to points in the pocket universe. Not only can the installations be reached, but the planet: themselves can be explored and exploited.

The pocket universe is an ideal storage site. The Ancients literally built some o their ships around pocket universes, drawing power from pocket universe powe sources, interconnecting chambers with teleportation portals, and keeping all nor essential ship components in the pocket universe. The ships could carry cargo c firepower far out of proportion to their size, and provided excellent protection t their crews, who could always retreat to the pocket universe if conditions becam too rough.

ANCIENT NETWORKS

The Ancient teleport networks are about 300,000 years old. Because of the e pense (it takes a lot of energy and equipment to pinch off a pocket universe), r more than twenty pocket universes were ever created. Each is associated with single ship, and those that survive are still functional.

The portals are the most vulnerable parts of such ships. When a portal is destroye it cannot be replaced except with tech level 25 technology. Once all of the porta are destroyed, the pocket universe becomes inaccessible (there are a few pock universes which are the tombs of their ship crews) and must be abandoned.

The Secret of the Ancients

The secret of the Ancients is a historical puzzle. The few facts that are available are not enough to form accurate theories, and the Ancients themselves never thought to leave a history behind. The true history of the Ancients is best known to one Ancient— the one who started the Ancients' civilization and who is miraculously still alive today. The following is the story that he can relate.

THE SECRET

About 500,000 years ago, a race of omnivore/gatherers achieved intelligence on their homeworld and soon became the dominant species on their planet. Although they were intelligent, they were also gentle and rather simple. Their social structure evolved castes which placed individuals in professions best suited to their talents and needs; their society was one of co-operation and trust. Each Droyne filled a position in society and society as a whole prospered.

After nearly 200,000 years of civilization these beings had settled their entire planet and achieved approximately tech level 10, although jump drive was as yet undiscovered. A few feeble expeditions to other stars had been mounted, and some small colonies had been established, but for the most part, they were content with their own world and the civilization they had created.

One day, a mutation occurred and a Droyne was born who had a fantastic level of intelligence. He quickly became bored with the ordinary existence of his race, and he set out to do something about it. He searched available occupations, did experiments, undertook projects, and thought long and hard. He found no single thing that he wanted to do, but at the same time discovered that he enjoyed looking. He decided that was what he wanted to do with his life: experiment, think, explore the limits of knowledge.

He decided that he needed help with his experiments, so he took over the world. He decided that he didn't want to get old and die, so he found out how to live forever. He wanted to know some facts about the stars and about other worlds, so he invented the jump drive and went to the visit them.

Then he decided that the Droyne were not intelligent enough to help in the really important projects, so he decided to have children. He had twenty children, and each of those children had about twenty of their own. At that point, he decided that was enough so he stopped. At about this time, he adopted a name which is translated as *Grandfather*.

For a long time, Grandfather worked on a wide variety of projects, assigning parts of each to his children and grandchildren. They scattered across the galaxy in search of information and new ideas, facts and answers to old questions. Grandfather and his children kindled supernovae, explored new worlds, tinkered with the genes of animals in search of new abilities or interesting effects, built magnificent places, and did intriguing (and sometime incomprehensible) things.

Each of Grandfather's children and grandchildren was in charge of a force of Droyne which actually did the work. Each took an assignment from Grandfather

and set about finding an answer, often creating new technology in the course of the project. Each went wherever Grandfather assigned and there built a base to support that particular project. When it was finished, the results were given to Grandfather, and a new project was assigned.

Grandfather found the Earth and experimented for a while with the idea of replacing the Droyne with human laborers, but it didn't work out. His human project was successful enough that they were used in quite a few locations. He also experimented with canines, genetically altering them to have intelligence, opposable thumbs, and an upright posture, but they didn't work out either.

Later, Grandfather built robots and artificial beings to help him, and found that they could be extremely helpful, although not as smart as most of his children.

Grandfather finally reached a point where he was tired, so he took a vacation, travelling throughout the Droyne's territory, seeing new things, reviewing work that had gone before, and taking it easy.

When Grandfather finished his vacation, he decided that he had done all that he could in this part of the universe, and so embarked on a new project to explore new and unknown frontiers of existence. He called all of his children to come and help him, but they had started on their own projects and were too busy to show up.

Grandfather started his work anyway, and soon found that some of his children's experiments started to get in his way. Grandfather decided that his decision to have children long ago had been a mistake, and now he determined to rectify it. He began a campaign to eliminate his children and grandchildren.

Naturally, the children found out about his campaign and resisted. The war of Grandfather against his children was a long and complicated one. Initially, the children did not understand that Grandfather meant to totally eliminate them; later, they adopted his tactics of total destruction.

Many factions arose during the course of the war. Some factions wanted to eliminate Grandfather, others wanted to create great-grandchildren, still others wanted to flee and start a new civilization somewhere else. A few wanted to go back to the old system of Grandfather-assigned projects. Some factions were Droyne without allegiance to any of the children or grandchildren.

Factions formed alliances with other factions when there seemed to be some temporary advantage. Sometimes Grandfather even allied with some of his children against others.

The war went on for two thousand years. Staggering weapons were called into use, including planet-busters, nova-triggers, bombardment with asteroids, and such ordinary weapons as tailored plagues, poison gas, and thermonuclear devices.

By the end of the war, Grandfather had beaten all of the opposing factions and destroyed all of his children (he kept careful count). The galaxy was somewhat the worse for wear, with many new asteroid belts and quite a few ravaged worlds.

Grandfather determined that he would, in the future, limit himself to more easilycontrolled assistants. He improved on the robots he had built before, and constructed a corps of robots and androids to help him in his experiments. Then, he pinched off a pocket universe around his base world and retreated from the larger universe to pursue his studies unhindered by the concerns of the larger universe.

THE SURVIVORS

While Grandfather killed all of his children, and all of the factions which supported them, and many innocent bystanders, he did not destroy all of the Droyne.

Droyne settlements on more than twenty worlds (including Andor and Candory in the Spinward Marches, Zeen in Deneb sector, and Auitawry in the Trojan Reach) survived with some remnant of their former glory.

On many other worlds, Droyne survived, but without their culture. Blasted back to the stone age, they survived as animals, but were never able to regain the technology they previously had.

Grandfather, however, did not forget the factions which had wholeheartedly supported him in his war. When he pinched off his pocket universe, he made sure that it included a world for that faction. For another faction which had supported him, but which he considered slightly untrustworthy, he pinched off a separate pocket universe solely for their use, and then closed all of the portals to it.

Library Data

The following material is available in library data banks within the Spinward Marches.

Ancients: Name given to a race of intelligent beings who inhabited various regions of this portion of the galaxy approximately 300,000 years ago.

Specific evidence of the Ancients is rare, and is almost always found in the form of ruins or destruction.

See also Known Data, page 13.

Ansing Expedition: Famous exploration of the accessible reaches of the gas giant Annikkittaar in the Pretoria system in 870 to 884. Extensive use of specially designed exploration vessels, protective environment suits, and high technology equipment allowed the Ansing Foundation of Vland to extensively map and explore the upper reaches of the gas giant's atmosphere.

Artifact: Any manufactured object.

The term artifact is commonly used to refer to any object, item, or group of related items produced by the Ancients.

Droyne: Intelligent major race inhabiting scattered worlds within an area slightly larger than the current extent of the Third Imperium. Droyne are evolved from winged herbivorous gatherers, with distinct differentiation into six castes (worker, warrior, drone, technician, leader, and sport) assumed at adolescence. Droyne appear to be a pastoral, easy-going race with little drive for expansion, conquest, or conflict.

The location of the Droyne homeworld is not known, and this puzzled sophontologists for some time, but recent investigations have shown that physically the Droyne and the Ancients are identical, indicating that finding the Droyne homeworld would mean finding the Ancient's homeworld as well.

The precise relationship between the Droyne of today and the Ancients of 300,000 years ago remains a mystery.

Humaniti: Collective name for all human races, including Solomani, Vilani, and Zhodani.

Solomani: Strictly, a member of that human race which developed on Terra from the original human stock (*H. sapiens*). The term Solomani is often used to refer to members of the Solomani race (or, more palatably to some, to members of the human race of Solomani descent) or to members of the Solomani political movement. Its original meaning is obscure, but the word seems to have originally meant either men of Sol or sole men.

After the Solomani developed jump drives in -2431, Solomani humans were scattered to the stars in several waves. Early colonization efforts first settled the worlds

closest to Terra. Later contact with the First Imperium led to the establishment of the Rule of Man and with it more Solomani humans ventured into space, primarily to occupy the former Imperial regions.

Solomani Hypothesis: The theory that the many scattered human races in the galaxy all originated on Terra and were transported to their current homeworlds by an alien race (the Ancients) for purposes which remain unclear. Most other human races accept the idea, but lend it no special importance. The hypothesis is used by the Solomani Movement as a basis for its claims for Solomani racial superiority.

Sophont: A generalized term for an intelligent life form.

Sophontology: The study of intelligent life forms. Subsidiary branches of this science include cultural sophontology, the comparative study of sophont societies; physical sophontology, the study of the genetic and physiological makeup of intelligent life; and developmental sophontology, the study of the various means by which life forms evolve intelligence.

System Defense Boat: A non-starship specifically intended for defensive operations inside a star system. Developed on the principle that a non-starship (because of the increased armament made possible by its lack of jump drives) can normally defeat a starship of equal tonnage. SDBs are typically stationed at the vital points of a system (the gas giants, the asteroid belt, the major world, and so on) and attack invading vessels according to one or more predetermined plans.

System Defense Boats range in size from 100 to 1000 tons and are constructed at all tech levels from 8 to 15. There are hundreds of different types, depending upon the specific mission for which they are designed.

Terra (Terra/Sol 0207-A867A69-F): Also known as Earth. Origin world of the genetic stock from which all races of Humaniti descended, former capital of the Terran Confederation, former capital of the Old Earth Union, and former capital of the Solomani Autonomous Region. The word Terran (used in the past to refer to an inhabitant of this world or to a citizen of the Terran Confederation) is derived from the name of this world.

Twilight's Peak: Legendary story of lost starfarers who discovered fantastic structures and devices while surviving a terrifying winter season. Based on an epic poem of execrable quality, the story seems to be based on the disappearance of the *Gyro Cadiz* task force in 984, which has never been completely accounted for.

Vargr: Intelligent major race derived from Ancient genetic manipulations of Terran carnivore/chaser stock, dating from approximately the same time that humaniti was scattered to the stars.

Inhabiting a region rimward of the Imperium, the Vargr were for years a puzzle to Imperial xenologists. The Vargr biochemistry and genetic makeup are almost identical with a number of terrestrial animals, but differ radically from most of the flora and fauna indigenous to Lair, the purported Vargr home world. Researches during the early years of the Third Imperium concluded them to be the result of genetic manipulation of transplanted Terran animals of the family *Canidae*, almost certainly of genus *Canis*. The obvious conclusion, supported by archeological evidence, is that the race known as the Ancients was responsible.

Physically, the Vargr are not very impressive. The typical Vargr is about 1.6 meters in height and weighs approximately 60 kilograms. They are upright bipedal carnivores, rear limbs digitigrade, with hands very similar in size and appearance to those of a human, although there are significant internal differences. They have approximately the same physical parameters as humans and are able to use the same equipment without modification or additional instruction.

On the average their reactions are slightly faster than those of the typical human, but individuals vary widely. The Vargr senses of smell and sight are superior to those of humans.

Vilani: Human major race (*H. sapiens*) which developed on Vland from human stock placed there by the Ancients.

The Vilani were the first of humaniti to develop the jump drive (in -9235) and were the first humans to establish an interstellar empire.

The old Vilani culture which developed during the first Imperium was a rigid caste system based on the idea that each citizen had a specific and set place in the universe, and it was each citizen's duty to remain in that place. Society could not afford to let individuals do as they pleased. Not all of the subject races of the Vilani Imperium were able to be completely absorbed into this culture (the Vegans, for example) and those societies did not do well under the Vilani Imperium.

The stability which Vilani culture achieved was not obtained without cost. Cultural rigidity brought with it stagnation, and the Vilani Imperium collapsed soon after contact with the young, vigorous Terran Confederation.

Currently, Vilani is a cultural rather than a racial or national labelling, and is applied to those within the Imperium who retain some of the old ways. The Vilani language survives in certain places, along with a few fragments of Vilani culture, such as musical forms and other fine arts. Certain of the old Vilani noble families have maintained more of the old culture, particularly the families who control the Vilani megacorporations.

Vland (Vland/Vland 0307-A967A9A-F): Homeworld of the Vilani, former capital of the Vilani Imperium, current capital of the Vland sector, and major trade and manufacturing center for the core/spinward regions of the Imperium.

Zhodane (Zhodane/Gaval 0309-A6547C8-F): Capital of the Zhodani Consulate homeworld of the Zhodani people. Unlike the capitals of other empires, Zhodane is largely divided into the estates of the members of the ruling Zhodani council, making the world's population unusually low. The Zhodani call the world Zhdant.

Zhodani: Human major race (*H. sapiens*) inhabiting the Zhodani Consulate, a region far spinward of the Imperium. In general, they tend to be taller than Solomani or Vilani, and lithe of build. Their most important difference is the acceptance and use of psionics. Zhodani society is divided into three classes: nobles, intendants, and proles. Nobles are the enfranchised ruling class, and receive psionic training from childhood. Intendants are managers and administrators of society, and also receive early training. Proles constitute the masses, are forbidden the use of psionics, and do not receive training.

Gimmicks

Gimmicks are interesting pieces of equipment which can be useful to the player characters in their pursuit of their goals, but which are not required. Often gimmicks can be momentary diversions which keep the players' interest.

Gimmicks can include unusual weapons, vehicles, vessels, or other special items not normally available for purchase. In this adventure, one specific gimmick is suggested (although the referee may come up with others as well).

SHIMMERSUITS

The shimmersuit is an Ancient artifact intended as a very high technology vacc suit with elements of armor and protective suit included as well.

This alien artifact is an all-body covering which gets its name from the iridescent sheen of its fabric. They are made from an elastic material which stretches to accommodate a wide range of sizes in wearers. Shimmersuits can be worn by humans with relative ease, but the gloves are made for three-fingered hands and so must usually be left off; wearing the gloves requires that one finger be tucked into the palm of the hand, which becomes uncomfortable after several minutes. The head covering is a semi-rigid helmet which has a transparent faceplate and a vacuum tight seal with the neckring.

Vacc Suits: Shimmersuits act as both vacc suits and protective suits. When worn with the helmet and gloves, the suit protects against vacuum, pressure up to 1,000 atmospheres, and temperature to 2,000° K for up to four hours before failing.

A recycling unit (contained in a small lump on the waistbelt of the shimmersuit) catalyzes carbon dioxide back into oxygen for up to four hours; after that period, the unit then needs to rest for four hours before it can function again.

Armor: Shimmersuits also work as armor, absorbing kinetic and electromagnetic energy and preventing injury to the wearer.

Kinetic energy (bullets or explosive force) is absorbed and will not penetrate the suit; the total force applied may cause the person in the suit to move, and that recoil may cause injury, but bullets or shrapnel will not directly penetrate the suit. The wearer of a shimmersuit receives no DMs for armor when attacked by any weapon firing a bullet, but any damage inflicted is reduced to one-quarter; the remainder of the damage is ignored.

Electromagnetic or radiant energy is selectively absorbed and reflected by the shimmersuit. Any laser attack on a shimmersuit is ignored. Plasma and fusion gun attacks consist of 3/4 electromagnetic energy and 1/4 kinetic energy (plasma and fusion guns are described in **Traveller** Book 4, *Mercenary*). The electromagnetic energy attack portion is ignored; 1/4 of the kinetic energy attack (1/16 of the total attack) is applied to the shimmersuit wearer. Round fractions down.

Shimmersuits have a hump on their back (between the shoulders) which is intended to accommodate folded wings. This hump can be used to position an oxygen tank (four hours of life support) and a communicator.

Shimmersuits are lightweight and can be worn without penalty to strength.