

GURPS Dune

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This is a preliminary draft of descriptions and rules alterations for a *GURPS Space* campaign balsed on the *Dune* series of novels by Frank Herbert. It incorporates elements from *GURPS Cyberpunk*, *GURPS Martial Arts*, *GURPS Martial Arts Adventures* and *GURPS Vehicles* (1st Edition).

It assumes that most of the action will take place on <u>Arrakis</u>, shortly before or during the actions of the first two novels: *Dune* and *Dune Messiah*. Further alterations and expansions can be developed to cover other areas of the Dune universe.

General Information

Campaign Style

The original 'seed' for this campaign was for the PC's to be a group of <u>Fremen</u>, or a smuggling organization operating on <u>Arrakis</u>. Starting Point cost for such a campaign would be around 100-200 points.

Other possibilities include:

Minor House

The PC's consist of the key players of a Minor House, starting point level: 100-300 points.

Great House

The PC's consist of the key players of Great House (Atreides, <u>Harkonnen</u>, Corrino, etc.), starting point level: 200-400+ (most of it in political connections and status).

Mercenaries

A band of mercenaries for hire, or members of any of the standing armed forces of a House Major or Minor. Starting Point level: 100-300 points.

Campaign Tech Level

The Dune Universe is considered to be TL9 with some major anomalies. Most of these anomalies can be attributed to the various advancements afforded by the Holtzmann discoveries. They include: faster-than-light travel, faster-than-light communications, force shields, and contragravity. These elements all exist in an otherwise 'standard' TL9 setting.

The second major deviation from the standard GURPS world of TL9 is the almost complete lack of any computers or thinking machines in the Dune Universe. Computers above Complexity 1 are very rare; those above Complexity 4 do not exist. This seemingly gaping hole in the technological fabric of the universe is filled by several elements, the most notable of which are the mentats. Mentatas are `human computers' trained from birth to perform complex logical and analytical functions at very high rates of speed and reliability. (More on Mentats below.) The Bene Gesserit Sisterhood also performs several similar duties, although with a strikingly different purpose and ideological bent.

Campaign Scope

According to the books, and secondary sources, the Imperium spans several galaxies, however only a few planets are detailed. This provides the Gamemaster the possibility of limiting the scope of the campaign to a smaller scale of a galaxy or part of a galaxy if that is desired. In any event, the FTL speed of the starships should reflect relatively short travel times between inhabitable plants (1-12 days, typically, with the longest trips being perhaps a month long).

Campaign Political Background

Name and type of stellar state: The Corrino Empire (or alternatively the Atreides Empire).

Control Rating: varies wildly depending on local governmental control.

Brief Description: The Empire of House Corrino is based on three bases of power: the Emperor, the Landsraad, and CHOAM. The various Houses rule local planets and systems on the appointment of the Emperor as vassals. The Landsraad consists of the various Houses, as a sort of Imperial Senate. CHOAM is an economic body concerning trade profits which ties the various houses together by economic means, not unlick a contemporary corporation and its shareholders. Directoships in CHOAM represent potentially vast wealth and economic influence.

A crude disctinction between a major and a minor house is the size of the fief. Minor houses are limited to a planetary or smaller scale of local government. Major houses are elected to representative positions in the Landsraad, and control one or more star systems.

Other political bodies worth mentioning: The Bene Gesserit Sisterhood and the Spacing Guild are both very active in politics, although not usually in an overt manner.

FTL comminucations speed, range and availability: Holzmann Waves.

Speed: instantaneous; range: 250 light-years (77 parsecs) without rebroadcasting. Availability: common. Ships in hyperspace cannot be contacted with any means of communication. Medical Technology: Normal TL9 medical technology, except for computerized diagnosis and treatment technologies.

Starship Rules

Almost all interstellar travel is handled by the Spacing Guild which holds a virtual monopoly on all resources required for such travel, namely: starships, starship navigators, and interstallar navigational information. The Steersmen are a specialized sub-race of humanity in the Dune Universe, who navigate by means of limited prescience. By seeing into the future, the navigator is able to adjust the course of his starship and find the correct path through hyperspace so his ship arrives safely at its destination. This means of navigation requires very little in the way of navigational aids like sensors and computer equipment. Navigators are a highly specialized breed, and probably not suitable for PC's. Because of this, I include no rules for their development. Below are suggestions for a campaign spanning roughly half of the Milky Way.

Faster-than-Light Travel

FTL Drive type: Hyperdrive

`Standard' Hyperdrive engines mass .010 ton, take up (including engine room) .030 cy and cost \$400 per ton of the ship's total mass. These engines require .1 MW-h per tone of ship to make the jump to hyperspace and .01 MW of power per tone of ship to maintain the ship in hyperspace the rest of the trip. A ship so outfitted would achieve a *FTL-speed* of 10 parcecs/hour.

Size and **efficiency** of hyperdrive both can be enhanced in order to achieve increased FTL-speeds. THis works on a simple proportional relationship up to twice standard size and twice standard efficiency. Effiency is a function of cost; size is a function of mass and weight. Thus, the maximum possible FTL-speed is 40 parcecs/hour.

The energy requirement of enhanced hyperdrives in increased by the square of the factor of final FTL-Speed increase.

Example #1: An engine which is 10% more efficient but the same size would achieve a FTL-speed of 11 parcecs/hour, and would cost \$440 per ton of the ship's total mass. All other figures concerning size and wieght would be as above. It would require .121 MW-h per ton of ship in order to skip and .0121 MW of power per tone to maintain the ship in hyperspace.

Example #2: An engine which is 40% larger than normal and 50% more efficient would mass .014 ton, take up .042 cy and cost \$600 per ton of hte ship's total mass. A ship so outfitted would achieve a FTL -speed of 21 parcecs/hour (10 x 1.4 x 1.5). THe factor of FTL-Speed increase for such a ship is 2.1, thus energy requirements would be increased by a factor of 4.41. Per tone of starship it would require .441 MW-h to skip and .0441 MW to maintain in hyperspace.

FTL navigation: 4-dimensional, eliete astrogators.

FTL side effects, error effects, special notes: See other references for more details concerning the Spacing Guild and interstallar travel.

Slower-than-Light Travel

STL Drive Type: Reaction Drives

"Steamships" are powered by a TL9 reaction engine, which uses water as exhaust. They produce 1 ton of thrust per 10 MW of power input, with an exhaust speed of around 200 miles per second. This drive could accelerate at 1 G for a week, or .1 G for ten weeks, by

using 18 % of the ship's original mass as reaction mass. Weight, mass and cost of this drive is: \$5,000, .1 cy, .05 ton per MW of power consumed.

STL Drive Type: Reactionless Drives

"Torch Ships" are powered by a TL9 reactionless drive which produces 1 ton of thrust per MW of power input. FOr each MW consumed, the drive masses 1 ton, takes 4 cy and costs \$50,000.

Power

Power Plant Type: Fusion Reactors (TL9)

Each plant takes a base \$1,000,000, 10 tons and 5 cy, plus \$100,000, .5 ton and .5 cy per MW capacity.

Weaponry & Shields:

Ultraviolet Lasers (TL9), TL12 (equivalent) Force Shields and unguided Rockets are all available.

Rules Variants

Shield Fighting

Personal shields have made almost all forms of projectile weapons completely ineffective for manto-man combat. Therefore, a return to the ancient melee fighting styles has come about. But the technological advantage of the shield has forced a modified approach. In game terms, the skill Force Shield has been slightly altered.

The Personal Defensive Shields of the Dune Universe are not round projections of force, but full-body shields which permit objects to pass through them, only slowly. An object attempting to pass through a planar field at a right-angle vector speed of more than the strike speed is faced with resistance which grows more intense as the fourth power of the velocity. When the speed is sufficiently high, the field becomes essentially solid to the impinging object. Shields have varying "strike speeds" -- that speed at which a normal object can pass a planar Holtzmann field -- that depends upon the electromagnetic admissions spectrum of the planar field. It is never less than 5.8 cm/s for one-angstrom fields, and increases only to 9.3 cm/s for all-absorptive fields. Typical shields have a strike speed of about 7 cm/s admitting most visible light, x-rays and gamma rays.

In hand-to-hand combat, this translates to a PD of 8 for a typical military shield. In addition the shield provides a DR 3 against swinging/crushing and swinging/cutting damage because the full speed of the attack can not be used. Most hand-to-hand attacks are carefully timed impaling attacks with fencing-style weapons like the foil or the knife.

Against ranged attacks of high velocity (bullets, rockets, grenades, etc.) the shield is extremely effective, providing a PD 12 and DR 50. Slow velocity slug-throwers do exist, but are rare and not very effective.

Bludgeoning attacks are very ineffective, but locks, holds and throws are just as effective against shielded opponents as against unshielded opponents. Against such attacks shields provide no defense.

Defensive shields react explosively upon contact with the coherent light of laser weapons. When coherent light impinges upon a planar effect field from either surface, all pseudo-matter bound in the shield is instantly converted to real matter. This converted matter then converts explosively to pure energy. Fortunately the actual mass of a planar field is quite small, on the order of .005 g for a personal shield. Thus, a typical personal defensive shield if touched by a laser beam, would result in an atomic blast with a power of .1 kilotons. The center of this blast is quite erratic, sometimes originating within the shield, sometimes within the laser weapon, sometimes both, with no way to determine it beforehand, making the tactic of using laser weapons to take out shields explosively suicidal.

The shield can also be used as an active defense like its medieval counterpart. However, because of its full coverage, it can be used not only to block incoming attacks but also to parry them. A skilled fighter can use his shielded arms to parry an incoming weapon attack without fear of being injured in the attempt. Effective parry is determined normally for the unarmed fighting skill, but considerations about attacking the parrying limb are ignored on a successful parry. Even on an unsuccessful parry, the parrying arm will be uninjured, unless it was the specific target of the attack.

However, the Holtzmann planar field is not impermeable, and several shield-fighting styles have developed to exploit this weakness. To model this development adequately, a new combat manuever is necessary: *For every melee combat skill there is also an appropriate shield-fighting manuever*.

Moreover, a very skilled combatant is familiar with the workings of a shield, and can compensate in such a manner, as to make the shield's defensive value less than optimum. When shield-fighting, assess a penalty against the defense roll equal to the amount by which the attacker made his roll. This rule is similar to the optional "Quicker Combats" rule found in the sidebar on page B108.

New Advantages

Elastic Body

\$250,000 40 points

A combination of rigourous training, embyological manipulation, and incredibly delicate surgery, allowing considerable changes physical appearance. In a matter of minutes, a character with this advantage can change his height, build, facial features, hair color and apparent length, and even sex. He can become any indivivual he wishes to mimic. A master user needs to see a person for only a minute to produce a rough similarity. Several hours of observation results in a likeness which can fool casual aquaintences of the victim. Given an opportunity to study the victim for several days, the subject's likeness is undetectable (for short periods of time) even by the closest of associates.

An adult trained in the use of this advantage can increase his height by a maximum of 15 cm, by stretching special back muscles; by constricting the same muscles, the discs in the spinal column can be squeezed to reduce height by a maximum of about 7 or 8 cm. These changes could be maintained for some hours, though not indefinately. Even the strongest need to relax the back muscles several times a day.

The ability to vary apparent weight is accomplished through use of the celomic sacs present in a normal human body, but altered to serve a special purpose. The sacs are caused to migrate during embryonic development to particular positions within the body, and then surgically altered after

puberty. When the subject achieves maximum growth, tubes of artifical tissue are implanted connecting the repiratory system to the celomic sacs. The tubes contain internal valves. The subject opens the valves by muscular action and, by closing the glottis, pumps air from the lungs into the expanding sacs. When the desired size had been achieved, the valve muscles were relaxed and the valves closed, trapping the air inside the sac until such time as the dancer decided to "deflate."

Pumping varying amounts of air into the pleural sacs alone gives an accurate appearance of breasts of the desired size. The size of the arms and legs can be increased somewhat through controllable edemas. Through this technique, a subject can look like he weighs anywhere between 120-280 pounds.

Natural hair is replaced with a liquid crystal strand which responds to varying temperature by changing color. The subject can control the amount of blood flow to his skin and thus the color of his hair.

Skin color is changed through the alteration of bodily hormones through control of the pineal gland, the pituitary gland and others.

In the early fetal stage of development hormonal stimulus prevents the urethral groove from closing at the proximal end. Further related measures equip the subject with both a functional penis and a functional vagina (subjects lacked a uterus and ovaries). Relatively minor surgery produces a fold in the mons veneris in which the penis is hidden. The disguise is completed by the voluntary control the subject possesses over cremaster muscles in the scrotum, which allows the retraction of the testes into the abdomen. Penile size is altered through control of the blood flow.

This advantage adds +8 to any Disguise roll, and can be used to mimic any common body type. It can be used to make the subject more attractive, giving up to an extra +2 reaction modifier. It can be used in conjuction with the Elastic Face advantage for a cumulative advantage.

Elastic Face

\$100,000 15 points

Injections shortly after birth slow and stop the ossification of the facial bones, and stimulate replacement of the mebranes of the face with a muscle-like tissue. Later localized injections reversed the cartiliage-to-bone process in limited areas. The face softens into a structure of cartilidge and muscle. In place of certain facial bones, the subject has envelopes of elastic cartilage filled with material of a putty-like consistency.

During the years before puberty exercises allowing the differential stimulation of the muscles of the face are performed daily. By mastery of these muscles, the subject can change such things as the size and shape of his "cheekbones" as easily and quickly as one might smile. For longer-lasting disguises, the subject, working with the likeness of the victim, molds the matter within the cartilage envelopes to the desired form, which would then be retained indefinately barring some trauma.

The muscles that replace the membranes between the large bones of the vault of the skull can be manipulated to increase or decrease the size of the skull within narrow limits, or change somewhat the shape of the skull.

Natural hair is replaced with a liquid crystal strand which responds to varying temperature by changing color. The subject can control the amount of blood flow to his scalp and thus the color of his hair. The hair style and apparent length of the hair was accomplished through embryonic

manipulation which causes certain nerves to develop as voluntary nerve cells rather than as sympathetic ones. These are the nerves that stimulated the erector muscles attached to the root of each cell.

Eye and skin color is changed through the alteration of bodily hormones through control of the pineal, the pituitary gland and others.

This advantage adds +5 to Disguise skill, or it may be used to make one more attractive, giving up to an extra +2 reaction modifier, and can be used in conjunction with the Elastic Body advantage for a cumulative advantage.

New Disadvantage

Shield Dependence -10 points/ -15 points

You are dependant upon the protective qualities of the Holtzmann defensive shield. When confronted with a melee combat situation where you do not have a shield, all of your combat rolls (both attack and defense rolls) are at -2. The more expensive version of this disadvantage is exactly as per Combat Paralasis (B32) when confronting a potential combat situation without a shield.

Most regular armies suffer from forms of this disadvantage.

New Skills

Force Shield (Physical/Easy) DX-4

This is the ability to use the Holtzmann Defensive Shield in man-to-man combat. The shield can be used to block or parry incoming attacks. The Block score is determined normally as per Shield skill (i.e.: Block = 1/2 Force Shield), the Parry score is derived normally from any of the unarmed combat skills like Boxing, Brawling, Karate, and Judo (i.e.: Parry = 1/2 Brawling or 2/3 Karate, Judo or Boxing).

Hunter-Seeker (Physical/Average) DX-4 or IQ-4

This is the ability to use the Hunter-Seeker assassination device. A skill roll is required to locate the target, and another to attack. The target may avoid the attack in two ways. First, he may remain perfectly still, making it extremely difficult for the attack to locate him. Roll a Quick Contest of Skills: Hunter-Seeker vs. Stealth +3. Second, after a sucessful parry of the hunter-seeker attack (as per Parry Missile Weapons Skill) the defender may attempt to grab the device and contain it. Roll vs. DX to see if he is sucessful.

A sucessful attack with a hunter-seeker ignores the PD of any personal shield the victim may be wearing, but not the PD or DR of other armor. If the hunter-seeker does not do sufficient damage to penetrate the targets DR, it is stuck and cannot be used to attack again.

Riding (Sandworm) (Physical/Average) defaults to DX-5

This skill is only taught by the <u>Fremen</u> of <u>Arrakis</u>, and is not normally available to characters of any other background.

This skill is the ability to mount and direct a giant sandworm to be used for transportation across the great deserts. A thumper (a <u>Fremen</u> device that simulates the rhythmic thumping of the mating-call made by a female sandworm when she prepares her nest) calls a male sandworm, where the sandrider rushes to the side of the worm and inserts a specially designed maker hook into the ring segments of the worm.

Once the rings are opened, exposing the sensitive inner tissues of the sandworm, the sandworm will rotate to shift the opening as far from the surface of the sand as possible. The sandrider holds onto the hook and is carried to the top of the worm, where he mounts more hooks to direct the worm, opening rings along the side to turn the worm.

A successful DX roll is necessary to mount the sandworm. Critical failure means the worm has smothered the sandrider, burying him under the bulk of his body (see rules concerning suffocation). A successful roll vs. Sandrider skill is necessary to gain initial control of the worm, and once per hour afterward to retain control (at +2 for every previously successful control roll).

Truthsay (Mental/Very Hard) No default Prerequisite: Empathy Advantage

This skill is only taught by the <u>Bene Gesserit Sisterhood</u>, and even then only to the elite Reverend Mothers. It is not normally available to characters of any other background. It is similar to the more casual Detect Lies skill, but, because of its methods, cannot be countered like Detect Lies can.

The <u>Bene Gesserit</u> is taught to `read' and `register' a person in order to manipulate him by Voice. This training can also be heightened to determine whether the individual is lying. Through the use of *reihani decipherment* a <u>Bene Gesserit</u> can recognize a registered individual no matter what overt change in behaviour or appearance he assumes. When combined with intense observational skills, the gifted <u>Bene Gesserit</u> can determine whether the individual is lying.

A successful roll vs. Truthsay will reveal that the subject has lied. It will not, however, reveal what the truth may be. Furthermore, because the skill is based only on careful observation of the subject, if the subject believes what he says is true, this skill will not reveal it as a falsehood.

Voice (Mental/Hard) No default

This skill is only taught by the <u>Bene Gesserit Sisterhood</u>, and is not normally available to characters of any other background.

Through Voice, a subtle manipulation of vocal tones, a <u>Bene Gesserit</u> can manipulate individuals or large groups by triggering clue tones. Certain voice patterns trigger primal human responses, and the registered person can be controlled in any situation. Women specifically gifted with The Great Control can manage any number of people in any situation, and can even control other <u>Bene Gesserits</u>. Particular subtleties of *Voice* usage are the *Lie Adroit* -- manipulation through concealed falsehood; the *Zensunni Codex* -- a play of words that confuses or obscures the truth; and the implantation of autosuggestive cue words (for example, the most common words thus implanted is "Uroshnor," a word itself empty of meaning, but which when spoken, triggers a state of immobilization). These techniques, however, are taught only for specific professional work.

A quick contest of skills, Voice vs. Will -6, is required for a successful use of this skill. If successful, the victim can be ordered to comply to any order of moderate complexity. The skill requires a period of careful observation of the intended victim's speech pattern before it can be used on him. Usually a few clear sentences uttered by the victim are enough.

New Manuevers

Penetrate Shield (Average) defaults to any Combat Weapon Skill doing cutting or impaling damage at Skill -3 Prerequisite: cutting or impaling weapon skill. Must Specialize.

The ability to fight in hand-to-hand combat normally against a shielded opponent. It cannot be used in conjunction with ranged attacks, except in particular cases like Knife Throwing and Guns (Needler) which represent specific techniques used to penetrate shields. Improving this manuever is useful if it is used in conjuction with the Force Shield skill (see above). Normally Holtzmann shields provide a PD 8, DR0 defense in melee combat. If this manuever is learned, the effectiveness of shields can be overridden. A successful use of this manuever will reduce shield effectiveness to PD 2, DR 0. A critical success will eliminate shield defenses.

Appropriate skills would include:

Axe/Mace, Broadsword, Fencing, Guns (Needler), Jitte/Sai, Katana, Kusari (Weighted Chain), Knife, Knife (Main-Gauche), Knife Throwing, Polearm, Shortsword, Shuriken, Spear, Thrown Weapon, Two-Handed Axe/Mace, and Two-Handed Sword.

Dune Characters

Bene Gesserit

The Bene Gesserit is known publically as a religious order, a mystic Sisterhood, which espouses a belief in in the supernatural control of the Great Mother. However, none of the available instructional material even refers to a transcendent force or being. In fact, in the Missionaria Protectiva material, religion is described as "the purposeful instruction of the masses." The texts describe thousands of religio-mythic variations on the theme of supreme, non-human power, but no evidence indicates the the Sisterhood believes in any power than that of its own goal, the Kwisatz Haderach.

The <u>Sisterhood</u> is dedicated to understanding humanity. All aspects of the concept are investigated, studied and documented by the <u>Bene Gesserit</u>. From Anatomy, Biology, and Genetics to Sociology, Politics, Religion and mythology.

The essence of the <u>Bene Gesserit</u> training philosophy seems to be that, if one can control oneself, or "know thyself," ultimately one can control the universe. its first axiom is "My mind controls my reality." The training is based on a series of progressive exercises lasting approximately ten years, which gives the student power to control herself mentally, physically, and psychologically, and to control others. Two goals of the training are: the ability to observe and understand reality with detached objectivity, and to insure that the Sister will have her self under control whatever the situation. The <u>Bene Gesserit</u> training allows members of the <u>Sisterhood</u> to be keen analysts, expert "seers," and fearsome fighters.

A two-part training program is pursued simultaneously by the candidate: the training of the mind and the training of the body. A small child spends hours learning the many languages in use in her culture, and later spend more hours sitting rock-still, lowering her body temperature or slowing her heartbeat, moving one muscle at a time as she catalogues the stimulus/response pattern of her body. The basic premise of the training is to achieve harmony and tranquility by establishing balance within the individual. Such training would reflect extensive study of the skills: Theology (Taoism), Philosophy (Zen Buddism), Meditation, Body Control, Body Language, Breath Control, Physiology, Psychology, Mental Strength and Yin-Yang Healing.

Furthermore, most <u>Bene Gesserit</u> sisters would enjoy some or all of these advantages: Absolute Timing, Acute Senses, Alertness, Combat Reflexes, Language Talent, Longevity, Rapid Healing, Strong Will.

The <u>Sisterhood</u> is a powerful Patron, and affords levels of Status, Wealth and Reputation to its members. Because the <u>Sisterhood</u> is the only party to teach some skills and the secrecy surrounding it, it is worth 40 points as an Unusual Background (alternatively the <u>Bene Gesserit</u> could be treated as a Martial Arts Master and knowledge of the cinematic skills and manuevers would require the advantage Trained by Master).

While people with physical disadvantages are not usually invited to join the <u>Sisterhood</u>, some diadvantages are common among the order. Delusions, Fanatacism, Greed, Intolerance, Overconfidence, and Melange Addiction can all be found among the members.

The <u>Sisterhood</u> commands a powerful Duty over its members, and has many Enemies. Teachers within the terhood may have other candidates as student-Dependants.

Bene Gesserit Prana-Bindu "The Wierding Way" 12 points/ 37 points

The "wierding ways of battle" are based upon complete prana-bindu control. The hand-to-hand combat techniques retained from ancient Terran cultures depend upon supreme muscle control for their astounding ferocity. Not only the unarmed combat manuevers depend on this training bu the extrordinary knife and whip skills also require this command of muscles and nerves. Prana-bindu control can heal wounds and retard aging. This style combines the powerful "internal" skills with devistating "external" manuevers with an effectiveness that unrivaled. Paul Muad'Dib's Feydakin are Fremen masters of this style, brought to them by the Lady Jessica.

Primary Skills: Judo, Karate, Knife, Theology (Taoism)

Secondary Skills: Boxing, Body Language, Knife (Main-Gauche), Philosophy (Zen Buddism) Optional Skills: Breath Control, Whip, Yin-Yang Healing

Maneuvers: Arm Lock, Elbow Strike, Feint [2 points], Kicking, Knee Strike, Hit Location [2 points]

Cinematic Skills: Blind Fighting, Body Control, Kiai, Meditation, Mental Strength, Power Blow, Pressure Points, Pressure Secrets *Cinematic Manuevers:* Enhanced Dodge, Sticking [2 points]

Bene Tleilax

The inhabitants of Tleilax, lone planet of the star Thalim, a source of immoral, although tolerated, technological products following the Butlerian Jihad. As such, the enigmatic <u>Tlielaxu</u> pose a potential threat to the delicate technological prohibitions of the feudal Imperium. However, the <u>Tleilaxu</u> deal in more that simple machine products. They also produce genetically engineered humans for specific purposes.

If any people should have been purged by the Jihad, it was the <u>Bene Tleilax</u>, whose technology recognizes no restraints in pursuit of their scientific interests. The <u>Tleilaxu</u> exist in a moral and ethical vacuum on the extreme periphery of the galaxy. Scientific inquiry and insatiable curiosity express themselves by <u>Tleilaxu</u> self-experimentation, a practice encouraged by the ample supply of lower-class subjects in their highly stratified society.

When they were discovered by an early Spacing Guild reconnaissance ship in 23 B.G. they could no longer enjoy concealment. However, the <u>Tleilaxu</u> were able to persuade the Guild to purvey their products to the newly formed Imperium. The amoral and morally debilitating fecundity of the <u>Tleilaxu</u>, who defined everything as either tool or product, was unleashed on a nobility that had grown desensitized by time to the psychological and ethical monstrosities that necessitated the Butlerian Jihad. Later, they were further protected from punishment under the edicts of the Great Convention when their security was guaranteed by both the Guild and House Corrino, and their products were welcomed by the less fanatical majority of the Imperium.

Such measures are necessary since the <u>Bene Tleilax</u> always view war, poverty, and religion as mere products or markets. Since most of their involvements in these areas involve human exploitation, <u>Tleilaxu</u> technology stresses genetic fabrications and psycho-neural adepts. They provide humanoid, sentient tools. Face dancers, gholas, sex toys, generals, twisted Mentats, subverted Suk doctors, Guild navigators and artifical melange are major examples of their wares.

Throughout their involvement in the Imperium, from their discovery through the fall of the God Emperor Leto II and the rise of the Siona-Duncan union, the <u>Tleilaxu</u> are considered objects of almost universal loathing, fear and disbelief. The "human distrans" is one of the causes of this attitude, and such beings are generally considered unclean, a degeneration of humans into machines.

Tleilax has many of the elements has a TL9 *GURPS Cyberpunk* world. Bionic modifications, computers, cybernetic implants, and cloning are all available here. Characters of <u>Tleilaxu</u> origin should follow the Cyberpunk rules for their creation. However, all cyberware is quite unnatural in appearance (see *GURPS Cyberpunk*, p. 31), but because of it's rarity should still cost the full point value. <u>Bene Tleilax</u> are experts in genetic engineering, and can design a human with any physical or mental advantage or disadvantage.

Their products are all for sale, but it is not uncommon for their product to be delivered with enhancements which were not specifically ordered. For example, the first Duncan-ghola, Hayt, was delivered with cybernetic eyes.

Face Dancers

Face dancers are specialized entertainer-spies from the planet Tleilax, the most famous of whom in Atreidean times was Scytale, would-be assassin of Paul Muad'Dib. Face dancers possess bodily adaptations and practiced intensive training to allow them to duplicate forms and movements of others. They are regarded by the masses of the empire with a mixture of awe, admiration and

revulsion in their cover professions of dancers and mimics, although the powerful know how effective a force for espionage the face dancers represent. They are therefore a major arm in the enforcement of <u>Tleilaxu</u> foreign policy.

In a matter of minutes, a face dancer can change his height, build, facial features, hair color and apparent length, and even sex. He can become any individual he wishes to mimic. A master face dancer needs to see a person for only a minute to produce a rough similarity. Several hours of observation results in a likeness which can fool casual aquaintences of the victim. Given an opportunity to study the victim for several days, the dancer's likeness is undetectable (for short periods of time) even by the closest of associates. The <u>Tleilaxu</u> endowed the face dancers with these abilities by a combination of rigourous training, embyological manipulation, and incredibly delicate surgery. The procedures are the most closely gaurded <u>Tleilaxu</u> secrets.

A Face dancer would possess the Elastic Body and Elastic Face modifications, and many of the Thief/Spy skills, Disguise being critical. Many face dancers were also excellent entertainers. Face dancers could not take any physical disadvantage that would limit their range of imitation such as Fat, Overweight, Skinny, Dwarf, or Giganticism. They would owe a considerable Duty to the Tleilaxu or their purchaser, and could possibly have several Enemies. The techniques used to create face dancers caused them to be sterile.

Gholas

One of the extrodinary and unique capabilities of the <u>Bene Tleilax</u> is the production of human duplicates known as gholas. The early gholas were produced by tissue regeneration requiring the immediate cryo-tranport of complete cadavers to the axolotl tanks of Tleilax. Gholas so produced retained their gene patterns and specific skills but lacked conscious memories of their pasts. They were frequently conditioned to respond with specific actions or behaviours to a particular word. Often, the stimulus "triggers" were produced by being generated in the same axolotl tank.

See *GURPS Autoduel* (p. 74-75), *GURPS Space* (p. 65) or *GURPS Cyberpunk* (p. 57) for rules concerning cloning.

Fremen

The Fremen culture changes significantly over the course of the Dune books. Given here is a rough template of the pre-Atreides era Fremen common on Arrakis during the Harkonnen occupation. These are essentially the Fremen encountered at the beginning of the book, Dune, but their culture already has begun to change by the end of that book -- change in very significant ways. Fremen Kempo, while not specifically discussed by Frank Herbert, can be derived from descriptions of Fremen history in conjunction with their daily life and activities. The Fremen -- prior to the arrival of the Atreides -- are a seminomadic people whose tribal culture is well suited to the hostile planet and its oppressive Harkonnen governors. Fremen education consists not of formal schooling in specific subject areas but of a total life training. A child is trained by all members of the tribe from his earliest days until maturity. The life and safety of the tribe depends upon each person's ability to observe the water discipline of the sietch and to know how to conduct himself on the dangerous open sands of Dune.

The Fremen are renowned fighters, and Advantages like Combat Reflexes, Immunity to Pain, and Toughness are common among their ranks. Because of the harsh environment of <u>Arrakis</u>, most Fremen with physical disadvantages do not survive, and even mental disadvantages can be fatal if they led to acting without considering the consequences. The Fremen are considered a worthless

race of people by the <u>Harkonnen</u> government, worth a -5 point Social Stigma. Duty to the sietch, Intolerance of outsiders, and a lesser Status are common traits. Most Fremen are vicious in battle and their duels are to the death, not first blood. Bloodlust would be appropriate. The life of the desert leaves very little time to put on weight. Many Fremen are Skinny, and none of them are overweight. Due to life in a stillsuit, most Fremen also have a strong body odor which is mildly offensive to non-Fremen, (worth a -5 point Odious Personal Habit).

All Fremen are addicted to the drug, melange.

All Fremen possessed a high proficiency in the following skills: Area Knowledge (Sietch territory), Survival (Desert), Camouflage, Stealth, Knife Throwing, Riding (Sandworm), and the unique Fremen martial arts style: Fremen Kempo.

Other skills: Brawling, Climbing, Botany, Leadership, Bard, Musical Instrument, Planetology, Piloting ('Thopter).

Fremen do not use Force Shields, as they a enrage sandworms and are prone to malfunction in the desert. This skill and its corresponding attack styles are not normally available to Fremen.

Fremen Kempo 8 points/ no cinematic skills

This is the martial art of the Fremen natives to <u>Arrakis</u>. Almost unknown to the general population of the Imperium, Fremen Kempo is a dynamic combat style. Its roots are found in the ancient teachings of predecessors of the Zensunni wanderers who first colonized <u>Arrakis</u>. There are dozens, if not hundreds, of different branches of the style, from "soft" styles similar to ancient T'ai Chi to "hard" styles not unlike kickboxing, and numerous variations in between as the various Fremen sietches personalize their own style. A mixed bag of the extremes is described here. There is a considerable body of legend around the Fremen and their role in the Imperium history. Their ferocity in battle is unrivaled in the galaxy.

The Fremen weapon of choice is the crysknife, a knife made from the tooth of a sandworm. It is considered most sacred by the Fremen. The tip, the hollow once occupied by the tooth's nerve, customarily holds a small amount of the most deadly poison available, most often a mixed derivative of the native desert plants. Fremen usually attempted to avoid killing a respected enemy with the tip of the blade; poison was considered a weapon more suitable for use against animals than humans. Other weapons included the kindjal, a curved, double-bladed short sword, short sticks, staffs, weighted chains, and whips. Weaponless combat also plays an important part in this style, with strikes, locks and throws being used.

Training is very intensive, designed to develop flexibility and speed more than strength.

Primary Skills: Judo, Karate, Knife, Knife (Main-Gauche)

Secondary Skills: Two skills from the following: Shortsword, Short Stick, Staff, Weighted Chain, Whip

Optional Skills: Philosophy (Zensunni), other weapon skills, as above.

Maneuvers: Arm Lock, Feint, Kicking, Spin Kick

Mentats

The name "Mentat" is derived from mentis, meaning "of the mind" in Latin, an ancient Terran language. The founder of the Order of Mentats, Gilbertus Albans, a logician and philosopher of interstellar repute, coined the term to refer to those fully trained and proficient in the techniques he prescribed for the Order. For thousands of years, society thought of Mentats as the embodiment of logic and reason.

A Mentat adept could be characterized as (a) a human in the generic, <u>Bene Gesserit</u> sense (although the <u>Sisterhood</u> would deny it violently), i.e. "an animal with reason and logic;" (b) an expert in all methods of logic and inference; (c) a conceptual generalist, in contrast to specialists in narrow areas; and (d) one possessing a quasi-truth-sense based not on prescience but on inference.

The Mentat adept is of achieving remarkable inferential linkages and gestalten spasms of pure insight, but unusually only when deep in a Mentat-trance. Some allege that the so-called Mentat-trance is merely a dramatic device used to make the Mentat appear more impressive. But the subjective reports of scores of Mentats and the objective evidence of hundreds of studies all point to the authenticity of the trance. The eyes glazed, the voice-intonation flattened, and awareness appeared to be turned inward.

Perhaps because of their apparent need to rely on their isolating trance-state for higher percentages of accuracy, Mentats historically failed as leaders. A supporting argument is that leadership is a matter of temperament, not reasoning ability. The effective leader must often make intuitive decisions in the absence of complete data. A good emperor, duke, general, or director acts because a decision must be made, but a Mentat delays because a decision should not be made.

All Mentats require a high (14 or greater) IQ score. Most would enjoy levels of Alertness and/or Acute Senses, and inherent Mathematical Ability. Absolute Direction and Absolute Timing would be appropriate for some Mentats. All Mentats are obviously Literate.

Mentat Ranks:

Minor Orders:

Memorizer: The fully prepared Memorizer is capable of retaining both related and unrelated information. The final test involved absorbing a series of 2 x 104 numbers or letters and reproducing them in correct sequence, duplicating the same timing or spacing as the original. Memorizers are able to repeat entire books from recall. They are able to replicate spatial configurations, such as the layout of a city after having seen the place (or plans of it) only once. Their chief accomplishment, however, is the ability to repeat conversations word for word from start to finish, mimicking the cadence and vocal inflection of each participant.

Treat this rank as the advanced version of Eidetic Memory, without the skill point multiplier for a point cost of 20 points. Memorizers are able to enter the Mentat-trance. Treat this as per Meditation skill. As well, vast volumes of information are studied at this level, which would translate into study of skills such as Agronomy, Anthropology, Area Knowledge, Botany, Chemistry, Geology, History, Languages, Linguistics, Planetology, Zoology. Memorizers are prone to becoming overwhelmed by the minutiae of data. This could be translated into an Odious Personal Habit (Babbler). The best defense against Babble is further training to categorize the data.

Processor: Processors learn to combine, divide, sort, and file pieces of discrete information with 99.9985 percent accuracy. They are capable of introducing order and regularity to seemingly unrelated sets of information. The chief danger to Processors is that the order introduced might or might not be in accord with reality. Thus, processors are trained to attempt first to use the categories and labels that others provide. This sorting, sifting, and retrieving of information, as well as the ability to connect it with specific names, places, or events, is valuable beyond estimation in the anti-computer culture of the times.

This level would be the equivalent in extensive training in Mathematics, and Research, as well as the of the Memorizer, and further study into knowledge-based skills. The Odious Personal Habit (Naive) is also appropriate to Processors.

Hypothesist: Hypothesists were trained to extrapolate from information to alternative explanations for the causes or the effects of that information. Hypothesists often prided themselves on the number of differing interpretations they could see in a set of events. The Hypothesist would naturally provide his master with at least a two-place ranking of the likelihood of the interpretations he offered. The primary hypothesis was 92 to 98 percent reliable.

This level adds extensive training in Philosophy (Logic), Accounting, Economics, and Intelligence Analysis to Processor training.

Major Orders:

Generalist: If Processors seem innocent and accepting, Generalists appear haughty and pedantic. Generalists overcome the naive literalism of the junior orders by "bringing to decision making a healthy common sense," but in achieving awareness of the "broad sweep of what is happening in his universe" (and note the relativism of "his universe"), the Generalist risks believing himself supreme in his encyclopedic store of knowledge.

Generalists are expected to possess broad and accurate knowledge of at least 94.75 percent of everything occurring in "his universe;" this knowledge, joined to the confidence-building Mentat training, leads many a Generalist to annoy his comrades with an overblown sense of his own superiority. Generalists are warned that principles of expertise can change, that no one can catalogue all knowledge, and that the Generalist is himself part of the set of phenomena to be learned. But even with these caveats, Generalists are very difficult people to work with.

Further study in any and all mental skills would be appropriate for a Generalist to add to Hypothesist training. The Disadvantages Overconfidence, and Odious Personal Habit (Self-Importance) would be appropriate to a Generalist. Generalists possess a minimum IQ of 15.

Simulationist: Mentats who free their reasoning from dependence on absolutes, and who can correct for assumptions hidden in another's inferences achieve the title of Simulationist. The Simulationist conceives and proposes in detail alternative futures, courses of action and explanations of events. Economic, political, and military strategy depended heavily on the unfolding of options by Simulationists: a good one can easily offer his master up to ten courses of action and what is more, infer the dozens of possible consequences of pursuing, altering, combining or disengaging any of these course. The Simulationist sees ever human being as a set of behaviour patterns ready to be orchestrated.

Extensive study in Economics, Politics, Psychology, Strategy, Tactics as well as the addition of the advantage Intuition make Simulationists very valuable assets. The minimum IQ for a Simulationist is 16.

Advisor: Only one novice in twenty achieves the coveted sixth rank, Advisor. Skilled in wisdom and diplomacy, possessing the abilities of all the lower ranks, adding sophistication and understanding, an Advisor is the equal in price and value of a Sardaukar legion or a bloc of CHOAM shares. Advisors planned for the long run, they negotiated delicate matters, they judged matters of life and death. A Mentat-Advisor is thought to be able to transform a mediocre ruler into a respected leader, and a better-than-average ruler into a potential emperor.

As well as further study in all mental skills, the study of Diplomacy, and Detect Lies are added to the Mentats very impressive list of abilities. An Advisor will not have an IQ of less than 17.

Mentat Dysfunction:

Memorizer Babble, Processor naivete, and Generalist pride have been noted above. But other conditions can impair a Mentat's abilities.

Mentat Freeze: Generalists and higher-rank Mentats are vulnerable to a syndrome called "Mentat-Freeze," which springs from self-doubt. Although taught to transcend the narrrowness of specialization, no human being can be entirely free from the element of uncertainty that transcendence implies. Repeated and strenuous questioning of a Mentat's computations does not lead to new computations -- those are inferentially determined -- but to anxiety about the base of those computations. Senior-rank Mentats are repeatedly warned that wavering is the first step toward the totally disabling Mentat-Freeze. That state halts all Mentat functions permanently unless the doubt could be removed and confidence restored.

The rehabilitation of frozen Mentats consumes a long process of hypnosis, counselling, and the ultimate rebuilding of a personality strengthened to resist self-doubt. So devastating is Mentat-Freeze that the condition, even if recovery was complete, is an insuperable impediment to progress of higher rank. Recuperated fifth and sixth rank Mentats are reduced to appropriate junior levels. Mentats are often haunted by fear of freezing, particularly those who labor alone, far from the protective support of the Order House or other senior Mentats.

Sapho Addiction: Addiction to Sapho, an energizing liquid extracted from Ecaz plants, is a trap to which Simulationists both in training and in the field are most susceptible. Although Sapho amplifies speculation and extrapolation, it subjects its user to unpredictable outbursts of emotion or long periods of passivity. The Mentat-addict's lethargy leads him to neglect the constant updating of information upon which his accuracy depends. The specific game effects of Sapho are detailed elsewhere.

Rhajia: For Mentats Rhajia is the song of the sirens. It is the total immersion of the Mentat in the inferential consciousness, and even the founders of the Order of Mentats disagreed on its nature. Some called it the "Movement of Infinity," and regard it as the final stage of the Order, a breaking of the chains of servitude to practicality; but others think it is a death-trap: only 30 percent of Mentats who enter rhajia "reawakened;" the other 70 percent become comatose and die. Those surviving report either no memories whatsoever or the most richly satisfying intellectual experience of their lives. Rumor has it that older Mentats near death seek rhajia as "the most pleasant passing" a human could be blessed with.

Mentat Variations:

Mentat-Assassin: The Ginaz School of Master Swordsmen provides training to Advisor rank Mentats, thus helping to create the specialization Mentat-Assassin. A valuable and necessary tool of any of the Houses Major before the reign of Leto II. Experts in the terms of kanly, and the Great conventions, a House's Master Assassin is as valuable as a legion of seasoned warriors. Besides completing all of the qualifications for Advisor rank, a Mentat-Assassin must possess a minimum DX of 14. Ginaz training would include expert level training in Beam Weapons, Disguise, Garrote, Knife, Poisons, Shortsword or Katana, Throwing, Savoir-Faire (Kanly), Staff, Stealth. The martial arts style An C'hi is appropriate for a Mentat-Assassin, as is the Weapons Master advantage.

Twisted Mentats: Tleilaxu "twisted" mentats are different from normal Mentats in those characteristics nonessential to pure computational ability. These variants take the form of body structure, emotional nature, and psychological make-up, depending upon the customers orders. As a result of their genetically tailored nature Twisted Mentats can have any Advantage or Disadvantage, regardless of other character considerations. Notable twisted Mentats include: Multifest Hydros, the mentat-politician who possessed seven different personalities; Piter de Vries, House Harkonnen's effeminate psychopathic killer; Lizao Twine, the mentat- hermaphrodite whose courtesan palace disguised a notorious web of intrigue; Bliss Numera, the female mentat-monk-chemist, who for twenty-six years livid in solitary confinement, existing on vegetable broth, but failed to perfect the formulae by which to transform silverfern into melange. Some twisted mentats are more twisted than others, and a few not very twisted at all. Nevertheless, because the mentats produced by the Tleilaxu are so often warped and bizarre in nature, they are increasingly regarded as objects of repugnance.

Sardaukar

The soldier-fanatics from Salusa Secundus who catapulted to power over the Landsraad in the Battle of Corrin (88 B.G.). The commander of the Sardaukar and his family became the Imperial House Corrino, named after the planet Corrin, near which the decisive battle took place. The grim ecological and social conditions of Salusa Secundus forge the military prowess of the Sardaukar, who are master swordsmen and deadly unarmed combatants, comparable respectively to Ginaz tenth-level fencers and Bene Gesserit adepts. The ruthless natural selection of Salusa Secundus breeds the Sardaukar who come to dominate first their planet and later the inhabited worlds of the Imperium under the imperial rule of House Corrino. They are rivaled only by the Fremen fighting forces of Arrakis, particularly Paul Muad'Dib's Fedaykin.

Sardaukar characters have excellent physical attributes, Combat Reflexes, and at least two levels of Status. Many would have High Pain Threshold, Immunity to Disease, Toughness, and a levels of Strong Will. Before the Arrakis Incident, House Corrino would be a very powerful Patron. Powerful or well-known Sardaukar would have Military Rank, and Reputations, and Weapons Master may be an appropriate advantage for some.

All Sardaukar owe loyalty to House Corrino worth Extremely Hazardous Duty. Bad Temper, Bloodlust, Bully, Fanaticism, Impulsiveness, Intolerance, Megalomania, No Sense of Humor, Sadism, Trademarks, and Odious Personal Habits are all appropriate disadvantages for a Sardaukar PC or NPC.

Sardaukar would be proficient in many of the following skills, and would have training in both shielded and unshielded combat skills: Armoury, Axe/Mace, Beam Weapons, Brawling, Broadsword, Demolition, Driving, Fencing, First Aid, Force Shield, Flail, Garrote, Gunner, Guns, Judo, Karate, Knife, Knife Throwing, Piloting, Pressure Points, Shortsword, Staff, Strategy, Tactics, Survival.

Sardaukar martial arts training favors the hard-hitting external styles. Styles such as Jeet Kune Do and Muay Thai are especially appropriate for their effective combat orientations. Military Hand-to-Hand would be known in any event.

Places

Arrakis

The transformation of Dune is as varied and as crucial to the Dune Chronicles as the transformation of the <u>Fremen</u> or the entire Imperium because of the Paul Atreides-Muad'Dib and the subsequent Atreides Empire ruled by Leto II. Dune was once a luscious planet with open water running on its surface. This water later vanished from the surface of the planet, throwing Arrakis into an extremely arid ecosystem. Various terraforming schemes started by the Imperial Planetary Ecologist Pardot Kynes eventually succeeded in transforming Arrakis to a green, lush planet under the rule of Leto II.

What follows is a description of the original planet, much as the Zensunni wanderers, the Harkonnen, and House Atreides found it.

Arrakis

Planet Type: Deser	t/Hot	Axial Tilt:	29 degrees
Diameter: 7660	miles	Seasonal Variation:	Moderate
Gravity: .868	G	Length of Day:	22.4 hours
Density: 4.95 g	/cm3	Length of Year:	778.76 days
Composition: Med	dium-Iron		
Atmospheric Pressur	e: 1.00 atm (Standard)	Climate:	
Atmospheric Composi	tion:	Temperature at 30 d	leg. Latitude:
Nitrogen:	74.32%	Low:	50 F
Oxygen:	23.58%	Average:	90 F
Other Gasses:	2.10%	High:	130 F
		Surface Water:	0%
Primary Terrain: De activity	esert; much volcanic	Humidity:	neg.
		Moons:	
Mineral Resources:		Krelln: Dia: 610 m,	Dens: 3.97,
<pre>Gem/Crystal:</pre>	none	.0554 G, No	atmosphere
Rare Minerals:	scarce	Avron: Dia: 263 m,	Dens: 2.02,
Radioactives:	uncommon	.0122 G. No	atmosphere

Heavy Metals: scarce
Industrial Metals: uncommon

Industrial Metals: uncommon Biosphere:
Light Metals: plentiful Dominant life form: Humans
Organics: uncommon Other significant: Sandworms

Special Notes: Arrakis is the only planet in the known universe to possess the geriatric spice, melange. Melange is fairly common on the planet, albeit dangerous to `mine.' Two chief dangers are the giant sandworms and the vicious Coriolis Storms.

Civilization:

Society:

Feudal Fief of House Harkonnen

Starports:

Carthag (Class V), Arakeen (Class IV), several Class I, II, and III facilities scattered throughout the inhabited region, most likely several Class III and lesser ports run by smugglers in remote areas.

Installations:

none (post-Atreides Arrakis would include: a Governmental center, several Religious centers, and a University (The Arakeen War College)).

Economic Production:

The spice is what brings people to Arrakis, and almost all efforts, not used for survival a used to harvest this drug from the sands.

Civilizations:	Population	PR	Tech Level	Control
Rating				
Harkonnen Presence	87,000	5	TL9 (shields)	5
Natives (non-Fremen)	15 million (approx)	7	TL9 (shields)	5
Fremen	20 million+	7	TL9 (no shield	s) 2
Total	45 million+	7		

System Information:

Star Name: Canopus

Type: F1 V

Biozone: 1.6-2.4 Stellar Mass: 1.87 Inner Limit: none

Number of Planets: 6 (+ 1 asteroid belt)

Planet	Orbit/Dist	Туре	Diam.	Dens.	Grav.
Atmosphere					
Seban	.35	Hot Rockball	2975	5.42	.369
None					
Menaris	.45	Greenhouse	9827	5.14	1.16
Dense CO2					
	.65				
	1.15				
Arrakis	1.95	Desert (Hot)	7660	4.95	.868
O2/N2					
	3.55	Asteroid Belt			
Extaris	6.75	Small Gas Gian	t 10140	1.31	.304
Superdense He					
Ven	13.15	Huge Gas Giant	263125	1.01	6.09
Hydrogen					
	25.95				

Renova 51.55 Cold Rockball 2781 2.43 .154 Helium

Notes:

Extaris possesses 7 moonlets, 5 small moons, and 4 medium moons.

Ven is a virtual star system by itself with 29 satellites: 10 moonlets, 8 small moons, 8 medium moons and 3 large moons.

Renova possesses one small moon, Laran.

Caladan

Homeworld for House Atreides before the move to Arrakis. A luscious water-rich world. A benevolent Atreides government makes this planet a jewel of the galaxy.

Giedi Prime

The Geidi system is the homeworld of House Harkonnen. Once a lush, forested planet, years of ruthless Harkonnen rule have devistated the eco-system of Geidi Prime, polluting her oceans, and atmosphere. Global-warming caused by the pollution has melted most of her ice-caps. This raised the ocean level several feet; coastal devistation was extrodinary. Acid rain, disease, and natural disasters (floods, droughts, hurricanes) now plague the planet. Rich in industrial metals, Geidi Prime is still a center for industry. Her rulers, seemingly without a care to the devistation they are working, have turned -- with ever increasing frequency -- to extravagent gladiatorial entertainment to appease the masses of starving people and retain order.

A colonization project on the arctic planet, Geidi Secondus has met with much success. A cold, harsh environment has slowed growth, but the ruthless Harkonnen fist has begun to make its mark on this planet as well.

Geidi Prime

Planet Type: Earth Diameter: 8850 Gravity: 1.16 Density: 5.73 Composition: Mediu	miles G g/cm3	Axial Tilt: Seasonal Variation Length of Day: Length of Year:	on: Moderate 28.4 hours	
Atmospheric Pressure	: 1.12 atm (Standard)	Climate:		
Atmospheric Composition:		Temperature at 30	deg. Latitude:	
Nitrogen: 7	7.32%	Low: 70) F	
Oxygen: 1	9.89%	Average: 90) F	
Other Gasses:	2.79%	High: 12	20 F	
		Surface Water: 52	28	
Primary Terrain: Plains and Hills; some		Humidity: 75	58	
volcanic activi	ty			
		Moons:		
Mineral Resources:		Randi: Dia: 650 m, Dens: 3.85,		
Gem/Crystal: uncommon		.0573 G, No atmosphere		
Rare Minerals:	scarce	Mardan: Dia: 850	m, Dens: 3.62,	
Radioactives:	ample	.0704 G, 1	No atmosphere	
Heavy Metals:	ample			
Industrial Metals:	common	Biosphere:		
Light Metals:	plentiful	Dominant Life fo	orm: Humans	

Organics: plentiful

Civilization:

Society:

Homeworld of House Harkonnen

Starports:

Trammel (Class V), Lothar (Class IV), several Class I, II, and III facilities scattered throughout the inhabited region, most likely several Class III and lesser ports run by smugglers in remote areas.

Geidi Secondus

Planet Type: Desert/Cold Axial Tilt: 33 degrees

Diameter: 6940 miles Seasonal Variation: High

Gravity: .849 G Length of Day: 36.3 hours Density: 5.34 g/cm3 Length of Year: 290 days

Composition: Medium-Iron

Atmospheric Pressure: .632 atm (Standard) Climate:

Atmospheric Composition: Temperature at 30 deg. Latitude:

 Nitrogen:
 79.82%
 Low:
 0 F

 Oxygen:
 14.89%
 Average:
 25F

 Argon:
 3.24%
 High:
 50 F

Other Gasses: 2.79% Surface Water: 67% (90% is frozen

in polar caps)

Moons: None

Primary Terrain: Icy/Barren with many Humidity: 75%

mountainous regions; some volcanic

activity.

Mineral Resources:

Gem/Crystal: uncommon Biosphere:

Rare Minerals: scarce Dominant Life form: Humans

Radioactives: ample
Heavy Metals: ample
Industrial Metals: common
Light Metals: plentiful
Organics: plentiful

Civilizations: Population PR Tech Level Control

Rating

Geidi Prime 11.1 billion 10 TL9 (shields) 5
Geidi Secondus 120 million 8 TL9 (shields) 3

Total 11.2 billion 10

System Information:

Star Name: Deigi Type: G3 V

Biozone: 0.8-1.2 Stellar Mass: 1.2 Inner Limit: none Number of Planets: 8

Planet Orbit/Dist Type Diam. Dens. Grav. Atmo. Fri .50 Greenhouse 4330 6.43 .638

Superdense

Geidi Prime .85 Earthlike 850 5.73 1.16 Pltd.

O2/N2 Geidi

Secondus	1.20	Desert/Cold	6 940	5.34	.849	Thin
02/N2						
Hrandi	1.90	Small Gas Giant	29170	2.24	1.50	
H2/He/NH3 Tardoz	3.30	Icy Rockball	2610	6.65	. 397	Trace
CO2	3.30	icy Rockball	2010	0.03	. 391	ITace
Rak-ti	6.10	Medium Gas Giant	5 8060	2.32	3.08	
H2/NH3						
Jailin	11.70	Medium Gas Giant	67110	0.87	1.34	S.
Dense H2						
Leidi	22.30	Medium Gas Giant	41210	1.43	1.35	S.
Dense H2						

Notes:

Fri possesses one moonlet. Hrandi possesses 13 moonlets, 4 small moons, 4 medium moons and 1 large moon. Rak-ti possesses 9 moonlets, 7 small moons, 4 medium moons, 1 large moon, and one giant moon; one of the medium moons is captured and orbits at an incline. Jalin possesses a spectacular ring system, 11 moonlets, 6 small moons, 6 medium moons, and 1 large moon. Leidi possesses a faint ring system, 12 moonlets, 7 small moons, 6 medium moons and 3 large moons.

Ix

Technological world. The most complex computers, and many `normal' TL9-12 items might be here, but it is closely guarded secret and not generally known -- and when known, not generally trusted.

Salusa Secundus

The Corrino Empire's prison planet and breeding ground for elite combat troops. The traditional source for the Sardaukar. This desolate planet is rivaled only by <u>Arrakis</u> for its harsh climate.

Tupile

The name traditionally used for what may be one or more planets or star systems; the sanctuary planet for defeated Houses Major and Minor under the terms of the Great Convention; also, the secret support base of the Spacing Guild.

Wallach IX

The homeworld of the <u>Bene Gesserit Sisterhood</u>. A pleasant Earth-like forest world, tranquile and remote.

Monsters

Shai-Hulud (Great Sandworm)

```
ST: 3000-10000+ Speed/Dodge: 22/0 Size: 220 - 3500

DX: 3 PD/DR: 6/50-1000+ Weight (in tons): 25,000 -1.6 million

IQ: 4 Damage: * Habitat: D

HT: 18/100-1000+ (per segment) Reach: C
```

A creature unique to the pre-Leto II era of the planet <u>Arrakis</u>. Attempts to establish the worm in other areas of the galaxy have met with only limited success. The completed life cycle has not been observed in any of the off-planet experiments.

Larger male specimens reach lengths exceeding 400 meters, and are close to 100 meters at the widest point. The smaller female measure approximately 100 by 20 meters. The throat of the male worm has been measured at 80 meters in diameter in the largest specimens. A set of 1,000 or more organic carbo-silica crystal teeth surround the mouth in a circular pattern.

The adult worm is made up of 100-400 segments. Each segment possesses its own primitive nervous system. Respiration is accomplished through pores in the tough silvery-grey outer skin. There is no circulatory system as such, since most of the nutrients are in the form of gasses. Each segment has a series of membrane "baffles" to absorb nutrients. Consequently, the sandworm is extremely difficult to kill. The only thing -- short of atomics -- that might stop a sandworm is the simultaneous application of massive amounts of electricity to each of its segments, stunning it temporarily.

The <u>Fremen</u> use sandworms for transportation, riding them great distances. Sandworms travel at an average speeds between 10 and 30 miles per hour. When ridden by Fremen, they are goaded into travelling at speeds upwards of 50 mph by continuous beating on the worm's tail segments. A large male sandworm, goaded by Fremen, has a range of approximately 450 miles before he stops due to exhaustion. Consequently, distances on <u>Arrakis</u> are often measured in "thumpers" -- the number of sandworms that need to be captured in order to make the journey. A "three thumper trip" would be approximately 1300 miles.

Shai-hulud's two attacks consist in his 'bite' and his 'trample.' A sandworm is attracted by any rhythmic noise and will usually rise from below the source of the sound and swallow it.

Standing too nearly to a sandworm as it passes might cause one to be pulled down into the sand. Roll vs. DX to avoid. On a failed roll treat as per suffocation (p. B91) as the victim is pulled into the swirling sand beside the worm.

Because of their size, sandworms can be detected up to 40 kilometers away from the air, and can be detected up to 10 kilometers away when one is standing on the surface of the sand. This gives one some time to move to safety before the attack. Holtzmann shields drive sandworms into a frenzy, and even a small personal shield operating on the surface of <u>Arrakis</u> will call worms from miles around.

Drugs

Melange

A complex bio-polymer originating only on <u>Arrakis</u>. Its several biological activities include interaction with various centers of the central nervous system (CNS), interaction with the immune system, and deposition within the sclera of the eyes. To date the biologically active portion of spice has not been isolated, although it is known that other portions of the molecule contain clycoprotein, a cupric heme and cinnamic acid.

The interaction with the CNS is primarily in the K"hliker-Kramptz center, which controls time-space awareness. In most humans this center is rudimentary, consisting of only a small number of cells (K-K cells) in the central cortex of the brain. Ingestion of the spice stimulates the growth of K-K cells so that the individual becomes more aware of his time-space environment. It is due to the action of the spice on the K-K cells that melange is addictive. If quantities in excess of 2 grams per 70 kilograms of body weight are ingested, addiction is encountered. Withdrawal of the spice from an addict results in insanity and eventual death due to the action of the breakdown products of K-K cells on other cells of the CNS.

The geriatric properties of melange are considerable. The addicts predicted lifespan is increased two to four times that of normal, depending upon the age at which the spice was first ingested as well as the dose. When the spice is digested, certain as yet unidentified breakdown products are absorbed into the bloodstream. These products interact with T-cells of the immune system, rendering the addict immune to most bacterial, fungal, parasitic and viral agents of disease. Ingestion of spice also imparts an immunity to many common poisons.

One of the most striking results of a diet high in melange is the "Eyes of Ibab," the characteristic "blue on blue" eye color: the whites and irises of he eyes turn a deep blue. Visual acuity is not reduced by the deposition of the blue pigment. In fact, in the white sun light of Arrakis, the pigment acts as a blue filter, increasing contrast and enhancing vision. A melange addict will receive the advantages Immunity to Disease, Longevity and Acute Vision (when on Arrakis or other planets close to bright A, F or G class stars), once addicted the user can never safely discontinue use of the drug. If forced to withdraw, treat as per the disadvantage Terminally Ill with the character's expected lifespan equal to his HT in weeks. Unless the addict can gain access to the drug, insanity -which would take the form of some or many of the following mental disadvantages: Berserk, Delusions, Compulsive Behaviors, Mania, Manic-Depression, Paranoia, Phobias, Split-Personality -- begins to set in at HT/2 weeks. Access to the drug will reverse some of these effects if the user is not completely gone. A crucial use of melange is to aid the Guild Navigators with the intricacies of space travel. The effects of spice upon the K-K cells in the mutated and highly trained Guildsmen allows them to 'see' into the future and guide their starships around disaster. Some Reverend Mothers are reported to have a similar foreknowledge in conjuction with spice usage, but such talents are very rare and require extensive training to use effectively.

Melange is very expensive, and highly addictive. However, because of the preponderance of spice on the planet <u>Arrakis</u>, addiction to melange will occur naturally within one or two years of living there. It can be postponed a year or two by including many off-world foods into the diet, but is inevitable.

An addict requires two grams of spice per day. On <u>Arrakis</u>, melange is common enough in nature to meet an addicts requirements through normal food and drink. Off-world, however, a 2 gram dose costs \$250. Melange is worth -25 points as an addiction.

Nerve Poison

A single dose injected into the body (by hypo, needler, crysknife, etc.) requires a HT-4 roll to avoid being paralyzed for (30-HT) minutes. 4d damage is taken if an antidote is not taken within 5 minutes. A dose costs \$5. Nerve poison is Legality Class 0.

Sapho

Sapho is an energizing liquid extracted from Ecaz plants. It is a trap to which Simulationist-Mentats both in training and in the field are most susceptible. Although Sapho amplifies speculation and extrapolation, it subjects its user to unpredictable outbursts of emotion or long periods of passivity. The Mentat-addict's lethargy leads him to neglect the constant updating of information upon which his accuracy depends.

This drug temporarily increases the users IQ by 1 point per dose taken. To obtain the desired effect, a user must make a HT roll at -1 for every dose taken. If the roll is successful, the attribute is raised y the number of doses taken, for a number of hours equal to the amount by which the HT roll was made (or one hour if HT was rolled exactly). If the roll fails, the attribute is raised by only 1 for one hour, regardless of the dose, and IQ decreases by the number of doses taken after the hour is up. On a critical failure, IQ is decreased immediately for 1d+4 hours. When the effect is over, the user becomes lethargic as per the Laziness disadvantage for 1d hours. Sapho comes in a liquid form which will gradually stains the lips of the user a deep, permanent red. It take approximately 10 minutes to take effect after ingestion. It is provided to Mentats training at school, and can be found with little difficulty on the open market. Cost is usually \$25/dose. Sapho is mildly addictive with heavy use. At the end of each month that a character has used Sapho more than once per week, he must make a Will roll to avoid Addiction. Most Mentats of Simulationist rank or higher do use Sapho, however, they do so sparingly, in order to avoid becoming addicted. Point value of a Sapho addiction is -10 points.

Semuta

A highly addictive narcotic derived, by crystal extraction, from elacca drug (the residue produced from burning the blood-grained elacca wood of Ecaz). The drug is either taken in capsule form or dissolved in wine, and produces a feeling of "timeless ecstacy," of separation from all pain and trouble. Accentuating this overpowering sense of well-being is the "semuta music" -- rhythmic, atonal vibrations composed to affect the sympathetic nervous system -- that accompanies the drug experience. Most often a single dose suffices to cause severe physiological addiction. Addicts are prone to fits of depression between doses, and are incapacitated when under the effect of the drug. Semuta is expensive, at \$250 per dose. Each dose lasts one hour plus 5d minutes. It takes approximately 15 minutes to take effect after ingestion. Semuta is expensive, incapacitating, and totally addictive, worth -40 points as a disadvantage.

Weapons & Equipment

Equipment

Hunter-Seeker

An ingenious assassination device which consists of two parts: the control console, from which the operator directs the weapon's movement; and the hunter-seeker proper, a thin metal sliver measuring five centimeters or less. The sliver is powered by a compressed suspensor field, which gives the operator the combined andvantages of speed (the hunter-seeker can travel, in short bursts, at speeds in excess of 100 kph [Move 28]) and high manuverability. In the hands of a skilled operator, it can be moved with the exquisite timing necessary to penetrate a personal force shield.

Once contact is made, the outcome is inevitable. Regardless of what portion of the body it struck, the sliver, attracted to electric impulses, is drawn into the nearest nerve pathway. It then follows this course to the major organs, leaving a path of torn and destroyed tissue in its wake. When sufficient damage had resulted to cause death, the flow of energy through the nervous system stopped, and the sliver freezes in place. The unstable metal is designed to disintegrate within half an hour of losing its energy contact, leaving only the tiny -- and easily overlooked - - crystal eye inside the corpse.

A sucessful attack roll ignores the PD of any personal shield the victim may be wearing. After a sucessful attack, the hunter-seeker does 2d impaling damage every turn, until the victim dies. Attempts to grab the device out of the air before it attacks are made at DX. The hunter-seeker is attracted to movement. A sucessful Stealth +3 roll will hide the target until he moves. If the hunter-seeker attacks, a sucessful parry (as per Parry Missile Weapon Skill) is required before the device can be grabbed.

The console weighs 4 pounds and has a remote control range of 75 feet. It uses a modified Holtzmann wave to relay commands. And does not require line-of-sight between the console and the hunter-seeker to aquire the target. The entire device costs \$4,000 on the black market, and is Legality Class 0. The hunter-seeker is powered by a AA cell which lasts for 30 minutes, the console is powered by a C cell which provides enough power for 3 months of continuous use.

Maker Hooks

Mechanical device of <u>Fremen</u> design and manufacture, used to mount and direct sandworms for transportation. They weigh 2 lbs. each, and at least two are normally used when controlling a sandworm. They are not commonly available outside the sietch.

Paracompass

A navigational aid of <u>Fremen</u> design and manufacture used on planets with weak or chaotic magnetic systems. Anyone attempting to navigate on <u>Arrakis</u> without one will become hopelessly lost unless extremely familiar with the surroundings. Treat as per familiarity rules in *GURPS Basic Set* (p. B43) when first using a paracompass to navigate. \$200, negligible weight. They are powered for a year on an A cell.

Personal Shield

The most common defense in the Imperium. A complete body shield is generated from a device mounted on the belt. It provide PD 8, DR 0 against most hand-to-hand attacks. Against swinging/crushing and swinging/cutting attacks it provides PD8, DR 3. Against projectile attacks of a speed more than 7 cm/s it provides PD 12, DR 50. The device weighs a half-pound and is powered for 20 minutes of constant use on a rechargable B cell. It costs \$500. For more detail concerning Personal shields, see the special rules concerning shield fighting above.

Stillsuit

A water reclamation full-body garment of <u>Fremen</u> design and manufacture for survival on the Arakeen desert. The garment allows desert survival by cooling the warer and by preventing water loss. An unprotected man, without access to a staggeringly large water supply, can last no more than a day on the sands; one wearing a stillsuit of Fremen manufacture, however, can keep water loss under fifteen milliliters a day, a thimbleful. Less efficient versions of the suits produced in village factories by the Arrakeen *peons* are greatly inferior and offer no such level of protection. All

desert Survival rolls, when wearing a properly adjusted, Fremen stillsuit are at +4. Without a stillsuit, survival rolls are at -10.

A Fremen stillsuit costs \$1000, weighs 10 pounds and provides PD1, DR 1.

Thumpers

Simple mechanical devices of <u>Fremen</u> design and manufacture. They are used to summon sandworms, by imitating the rhythmic thumping noise made by a female sandworm as she prepares her nest. They weigh 3 lbs., and are not commonly available outside the sietch.

Weapons

Monofilament & Vibroblades

These technologies are not available in the Dune Universe except monofilament garrotes commonly carried by Imperial Sardaukar.

Crysknife

The Fremen weapon of choice is the *crysknife*, a knife made from the tooth of a sandworm. It is considered most sacred by the Fremen. The tip, the hollow once occupied by the tooth's nerve, customarily holds a small amount of the most deadly poison available, most often a mixed derivative of the native desert plants. Fremen usually attempted to avoid killing a respected enemy with the tip of the blade; poison was considered a weapon more suitable for use against animals than humans. Two varieties of crysknives are produced by the Fremen: fixed and unfixed. A "fixed" blade was treated with electrical current so that it might be stored indefinately. Far more common among the Fremen, an "unfixed" blade remains stable only so long as it remains in contact with a living human body. Deprived of the body's electrical field, the knife weakens and crumbles within a matter of hours. Treat both varieties as Large Knives of Super-Fine quality. They cannot be purchased, but must be received either as a gift, or earned in duty to the sietch. A successful impaling attack with the knife is necessary in order to deliver the poison to the victim.

Lasguns

Lasers are per normal *GURPS* rules for TL9, except that their violent reactions with shield technology has made their use extremely hazardous. They are common only at special events, and in areas where shields are rare, or unusable (like <u>Arrakis</u>).

Maula Pistols

The common maula pistols are per normal *GURPS* rules for TL8-9 spring-loaded needlers. Most needlers in the Dune Universe use drugged or poisoned needles. Gauss needlers do exist in the Dune Universe, but because of the extensive use of personal shields, and the high velocity of gauss needles, they are not commonly used.

Vehicles

Generic Dune `Thopter (TL 9)

The all-purpose transport used on almost all worlds within the Dune Universe. The `thopters can serve in a number of roles, from cargo and troop transports, to spotters and ground troop fire support.

Highly maneuverable, and equipped with a vertol lift system as well as ornithopter wings, this vehicle can perform V/STOL with little difficulty, landing in places where it is impossible for other vehicles to reach.

It is lightly armored, and usually unarmed -- although Houses have been known to mount lasguns and rockets on `thopters. The armor is more a protection against the various elements of hostile planets, including <u>Arrakis</u>. It has a pressurized cabin and five man-days worth of limited life support.

Its one hardpoint can be equipped with numerous equipment pods for extra cargo capacity, it is quite common to mount an extra fuel tank there -- which increases operating endurance to two days.

Structure:

500 cf medium standard body, maximum load 20,000 lbs (HT 600). Fair aerodynamic streamlining, two retractable skids (HT 200 each), high-agility, combat-stressed, STOL wings (PD 5, DR 25, HT 300 each), vertol flight system.

Propulsion:

TL9 ornithopter drivetrain w/ 573 KW motive power (HT 30), TL9 Hyperfan (HT 60) w/ 12,000 lbs. thrust. Hyperfan uses 120 gallons of hydrox per hour.

Power:

TL 9 MHD Turbine with 573 KW output (HT 20), reaction engine (see above), Two TL9 self-sealing fuel tanks with 125 gallons of hydrox each, provide 2.08 hours flying time with reaction engine, 29.07 hours flying time with ornithopter powertrain, 1.94 hours with both, Fire 10).

Accommodations:

Five normal, internal G-seats.

Vision: Few windows.

Crew Requirements:

Pilot and often a co-pilot/navigator to relieve fatigue on long flights.

Accessories:

Limited lifesystem with five man-days life support (HT 20), short range radio (w/ tactical channels), long-distance radio (DR 3, HT 4, electronics), dual controls (HT 20). Armor: 200 points standard armor. F 5/25, B 5/25, R 5/25, L 5/25, T 5/25, U 5/25, RW 5/25, LW 5/25.

Cargo:125 cf.

Statistics:

\$819,985, design mass 10754.4 lbs., max. payload 9246.6 lbs., max. cargo load 5000.0 lbs, max. hardpoint load 1900.0 lbs., current payload 500 lbs., loaded mass 11254.4 (5.63 tons), Size Modifier +4, Radar Signature +5, IR Signature +2 (+5 using reaction engine), Acoustic Signature +2 (+7 using reaction engine).

Ground Performance:

Top ground speed 41.25 mph, acceleration 6.75 mph/s under ornithopter power, 10 mph/s under hyperfan, 16.75 mph/s under both, deceleration 5 mph/s, MR .25, SR 4.

Water Performance: none

Aerial Performance (Ornithopter Flight Mode):

Stall speed 41.25 mph, top speed 180 mph, acceleration 9 mph, deceleration 15 mph/s, MR 15.25, SR 5.

Aerial Performance (Jet Flight Mode):

Stall speed 45 mph, top speed 640 mph, acceleration 20 mph/s, deceleration 15 mph, MR 15.25, SR 5.

Aerial Performance (Vertol Flight Mode):

Stall speed none, top speed 192 mph, acceleration 8 mph/s, deceleration 10 mph/s, MR 1.5, SR 2.

Sources

Herbert, Frank. Dune, (New York: Berkley Books, 1965).	
Dune Messiah, (New York: Berkley Books, 1969).	
Children of Dune, (New York: Berkley Books, 1976).	
God Emperor of Dune, (New York: Berkley Books, 1981).	
Heretics of Dune, (New York: Berkley Books, 1984).	
McNelly, Willis E. <i>The Dune Encyclopedia</i> , (New York: Berkley Books, 1984).	

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