

STARCLUSTER



STARCLUSTER ROLE PLAYING GAME

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**SPECIAL THANKS TO MARCO CHACON
FOR THE EVOCATIVE INTRODUCTORY LINES**

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STARCLUSTER - PLAYING THE GAME



STAR CLUSTER PLAYING THE GAME

by clash bowley

STARCLUSTER - PLAYING THE GAME

EVERYONE KNOWS ABOUT THE SLOW-BOATS - MULTI-TON
METAL ENCASED HABITATS HURLING THROUGH VOIDS
AT SPEEDS THAT SHIFT THEIR COLORS INTO THE NEARLY ULTRA-VIOLET
SHADES OF DOPPLER-BLUE. THE VOIDS THEY TRAVELED THROUGH
ARE SO VAST THEY MIGHT AS WELL HAVE BEEN FLIES STUCK IN AMBER.
EVERYONE KNOWS ABOUT THE SLOW-BOATS.
EVERYONE KNOWS THAT ROME COULD HAVE RISEN AND FALLEN
BEFORE THEY FOUND THE SANCTUARY OF THEIR DISTANT SUNS.

AND EVERYONE KNOWS ABOUT THE DIASPORIA.
ESCAPE. TRANSITION. EXODUS.
HUMANITY EXPLODING LIKE SHRAPNEL ACROSS A SEA OF STARS SO BIG
THAT THE CENTER OF THE GALAXY IS A HOLE IN SPACE
ITSELF FAR VASTER THAN THE SOLAR-SYSTEM THAT BIRTHED US.
EVERYONE KNOWS ABOUT THE EXODUS.
EVERYONE KNOWS ABOUT LEAVING THE GARDEN.
IT'S OUR OLDEST STORY AND LIKE ANY OLD STORY IT GETS TOLD
OVER AND OVER AND OVER.
EVERYBODY KNOWS.

BUT THEN THERE'S THE CLUSTER.
AND MAYBE YOU *DON'T* KNOW ABOUT THE CLUSTER.
A TINY STAIN OF STARS ON THE EXPANSIVE FABRIC OF THE MILKY WAY
AND THE EVEN LARGER CLOTH OF UNIVERSE ITSELF.
THE CLUSTER--IF EVERY EXODUS HAS ITS PROMISED LAND,
FOR SOME OF THE FRAGMENTS OF HUMANITY THIS WAS IT.
AND IT'S YOURS.

THIS IS THE CLUSTER.
OVER A HUNDRED SUNS
OVER FIVE HUNDRED WORLDS

THE CLUSTER IS AN AGGREGATION
OF RACES, SPECIES, SOCIETIES, PEOPLES --
A PLACE BIGGER THAN ANY CITY,
ANY NATION,
ANY SINGLE *WORLD* YOU CAN IMAGINE.
IT'S TEEMING WITH TRADE. IT'S BURSTING WITH POSSIBILITIES.
IT'LL SUPRISE YOU. AND IF YOU TAKE IT TOO LIGHTLY, IT'LL KILL YOU.
BUT IT'S EVERYTHING--
EVERYTHING THOSE SLEEPERS ON THEIR SLOWBOATS COULD'VE HOPED FOR.

LUCKY YOU. YOU'RE THERE FIRST.
THE STARCLUSTER RPG
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STARCLUSTER - PLAYING THE GAME

The object of the game of StarCluster is to *survive*. There are Creatures, there are Aliens, and there are Characters, and they all want to survive, but they all have goals of their own, and you may be in their way. Getting into a foolish fight is not a survival tactic, and is to be dissuaded. Player can have anything as a character: a robot, an alien, an uplifted alien, an android, or whatever else is agreed upon between the GM and the player. The core rules assume humanoid characters, but are easily adaptable to other 'creatures'.

There are no character classes in StarCluster. You have skills, and you have jobs, and you have education. Having certain skills and/or certain education allows you entrance into certain jobs. Great characters can be built from the meagerest beginnings. The game is designed to *force* the character to move around to different jobs. Let the game do what it was designed to do, and accept that you will be doing different things at different times.

One way to look at this is to assume that all or most of the jobs you do are directly related to a single overarching career. Thus, for example, a character who went to a seminary becomes a priest. After a few years, he then takes a job as a courier, then as a diplomat, and finally as a teacher. It is entirely possible that all of these jobs can be done within his overarching role as a priest. One can also look on a career progression as a series of entirely separate jobs. The player may choose how this works.

CREATING A CHARACTER

The Character Generation book, together with the Humans and Humanoids book, contains all that is necessary to create a StarCluster character. In StarCluster, you will continually be forced to decide between depth and breadth of knowledge. The deeper your character's knowledge, that is, the higher your plus rating in your skills, the better your character can use those skills. The broader your character's knowledge, the more skills you have to affect things. Your character will always be a compromise between depth and breadth. Every character is unique in StarCluster, and there is no "better" character. StarCluster characters proceed directly from the life experiences and history of the character.

CONSTITUTION

Constitution is the character's total ability to keep functioning. The constitution is the character's strength, coordination, agility, and endurance added together and multiplied times ten. The constitution has various levels which indicate how the character is doing:

Normal

The character is at peak condition, and functioning normally.

Hindered

The character is hurting. Initiative, To Hit, Damage, Skill, and any other %d roll is at -20.

Unconscious

The character becomes Unconscious. The character can be made conscious again by shaking or shouting, but any damage will make the character Unconscious again. In addition, the character is also Hindered.

Seriously Wounded

The character is **really** hurting. The character is Unconscious, cannot be woken up, and is bleeding to death at the rate of 10 points per round. The bleeding will stop if the wound is bound, another character taking one round to do so, and is defenseless while doing so.

Normal Level is 100% of constitution,

Hindered Level is 75% of constitution,

Unconscious Level is 50% of constitution, and

Seriously Wounded Level is 25% of constitution.

When the character is between Hindered Level and Normal Level, the character is Normal. Between Unconscious Level and Hindered Level, the character is Hindered. Between Seriously Wounded Level and Unconscious Level, the character is Unconscious. Below Seriously Wounded level, the character is Seriously Wounded. If the character is exactly on a level, a character functions at the level above. For instance, if a character is exactly at Hindered Level, the character is Normal.

STARCLUSTER COMBAT

STARCLUSTER - PLAYING THE GAME

The combat system of StarCluster works on the assumption of a one-minute round. This is divided into 120 half-second segments called "initiatives". Normal initiative is between one and 100, and is decided using a %d roll. Characters who are hindered or worse have a -20 penalty to their initiative, and thus may drop as far down as -19. During their initiative, the character may use a weapon and attack, use psionics, or perform a major action. What constitutes a major action is necessarily left to the discretion of the GM, but certainly driving a vehicle, performing first aid, or moving long distances are major actions, and these should give the GM some indication of the use of the term.

Characters who have achieved **weapon mastery**, that is at least a +5 in that weapon skill, gain an extra attack each round with certain weapon types. The same holds true at every fifth level of weapon skill, i.e. +5, +10, +15, and so on. A character with a gun skill of +11 thus would have 3 attacks per round with any gun. These attacks should take place at intervals of 10 initiatives.

Thus Penelope, a character with Gun+11, has 3 attacks per round. For her initiative, she rolls a 54. If she is not hindered, she may perform an attack on initiatives 54, 44, and 34. This is referred to as 'splitting' an initiative. A character may opt to perform a small action on one of her split initiatives if the GM feels that is reasonable. For instance, Penelope uses her attack on initiative 54 to gain 50% cover behind a large boulder. Penelope may **not** use one of her three split initiatives to perform a major action, use Psionics, or attack with a different type of weapon. These things take up the entire initiative. If there is an ambush or surprise attack situation, each side rolls %d. The results are compared. If the dice are within 20 of each other, there is no surprise, and normal combat begins. If the attacker rolls more than 20 higher than the defender, the attacker has surprised the defender and gets an entire round (one minute) to attack without reply from the defender before normal combat begins. If the defender rolls more than 20 higher than the attacker, the surprise is bungled entirely, and the defender gets an entire round of attack against the attacker with no reply before normal combat begins. If the characters achieve surprise, they should individually roll initiative on %d, and act from highest roll to lowest. When normal combat begins, initiative is rolled. Each player rolls %d separately, and the enemy rolls collectively. Highest roll goes first, and proceeds to lowest. Characters and enemies can talk out of turn, but remember there are 120 initiatives in a round (-20 to 100) and each initiative is half a second long, and talking must be short.

Psionics happen immediately, as soon as they are used. Characters may make gestures and say (or sing) words, but these are just mnemonic tricks to help them remember, and the skills can be used without them perfectly well. If the character or enemy makes a physical attack, the character or enemy makes a To Hit roll with %d. If the result is equal or less than the to hit roll necessary to hit that armor, Damage is rolled. Damage is rolled as %d plus the damage rating of the weapon. For example, a Light Sword has a damage rating of +50, so the player rolls %d and adds 50 points, for a result between 51 and 150. If the damage rating is negative, the number is subtracted from the %d roll, with any negative result rounded to zero, so a weapon rating of -20 would have a result of 0 to 80 points. This number is subtracted from the character's or enemy's constitution.

Combat in StarCluster tends to be short, brutal, and bloody, but seldom deadly. One side of the combat will usually end up unconscious, with a few seriously wounded, and possibly one or two dead. This is good for the game, and good for the players, as losing a single combat usually means they are taken prisoner, rather than dead. Flying creatures will swoop and dive on non-flying creatures, so non-ranged weapons, such as swords or unarmed combat, will only affect the flying creature during the initiative it attacks, and the initiative immediately preceding and following the attack.

RANGES

Ranges in StarCluster are given by weapon. A weapon's range rating is one of the following:

Point Blank - Within 2 meters. This is the range for all held weapons that must be used held in the hand, like most blades and melee weapons.

Short - Between 2 and 10 meters.

Medium - Between 10 and 50 meters.

Long - Between 50 and 250 meters.

Far - Between 250 and 1000 meters.

Very Far - Between 1000 and 2000 meters.

A weapon's Range rating is the range at which it is normally effective, that is, at a penalty of zero. The next range higher is always at -40% to hit, the range after that is impossible to hit. Closer ranges give a +5% for each of the next two range steps, giving a +5% to hit for the next nearer range step and +10% for the next range step closer than that. Targets closer than this are impossible to hit with this

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weapon.

For example, Mike has a gun+5 and a COOR of 9. This gives him a base to hit percentage of 65% to hit "Skin" for gun weapons, modified up +5% for his coordination to 70%. Using an Auto Pistol, with a Range rating of "Medium", Mike hits targets with "Skin" armor at medium range at the nominal percentage, which is 70%. At "Long" range with this weapon, Mike has a -40%, or 30% chance to hit. At one step nearer, or "Short" range, Mike has a +5% or 75% chance to hit. At one more step closer, that goes up 5% again, to 80% at "Point Blank" range.

In a further example, Mike uses a Sniper Rifle, with a Range Rating of "Far". If the target (wearing "Skin" armor) is at Far range, Mike has a 70% chance to hit. If the target is at "Very Far" range, Mike has a -40% modification giving him a 30% chance to hit. At "Long" Range, Mike has a +5%, or 75% chance to hit. At "Medium" range, he gets a further +5% to hit, increasing his chance to 80%. At "Short" range and closer, Mike cannot hit the target, as it is too close. If the target is further away than "Very Far", Mike cannot hit the target because it is too far away.

COVER

Cover is the use of obstructions to decrease the probability of being hit. Examples are hiding behind a rock, or firing from around a doorway. In StarCluster, cover is rated in 4 steps: 25% cover, 50% cover, 75% cover, and 100% cover. The effects of such cover are given below.

25% Cover - The target is behind a small rock or tree, or perhaps an obscuring curtain of cloth or leaves. If the shooter rolls a hit, a second roll against the cover is made. A roll of 25 or higher, unmodified, is a true hit, anything lower hits the cover instead of the target. The target has no penalty to return fire.

50% Cover - The target is behind a low wall, or shooting around a doorway or a large tree, or something similar. If the shooter rolls a hit, a second, unmodified roll is made against the cover. A roll of 50 or greater is a true hit, anything else hits the cover. The target has a -25% penalty to return fire.

75% Cover - The target is in a well protected position, firing through a loophole or small window, or some similar situation. If the shooter rolls a hit, a second roll against the cover is made. A roll of 75 or higher, unmodified, is a true hit, anything lower hits the cover instead of the target. The target has a 50% penalty to return fire.

100% Cover - The target is entirely behind some large, solid object, and cannot be hit. The target cannot return fire, as doing so will reduce the cover to a 75% rating at least. Cover should be adjudicated by the GM using the examples above.

POISON

Poison can be used in combat, and can be made by characters with the Drug, Herbalism, or Chemistry skills. The chance to make a poison is equal to the normal skill chance minus 20, thus if the character has a skill chance of 50%, the chance to make poison is 30%. Poisons made with the Chemistry or Herbalism skill have a minus 20% on their effectiveness, while poisons made with the Drug skill have a plus 20% on their effectiveness. Natural poisons used by creatures have a normal effectiveness. If poison is made, roll %d and consult the following table:

POISON EFFECTIVENESS TABLE

-20 to 10	No Effect
11 to 20	-20 constitution
21 to 30	-50 constitution
31 to 40	-100 constitution
41 to 50	Automatic unconsciousness for 1d6 rounds
51 to 60	Automatic unconsciousness for 1d10 days
61 to 70	Reduce target's constitution to one below Unconscious Level
71 to 80	Reduce target's constitution to one below Seriously Wounded Level
81 to 90	Unconscious, with death in 1d6 rounds unless healed
91 to 120	Immediate death

HEALING

STARCLUSTER - PLAYING THE GAME

Healing can be accomplished several ways. Psionically, with heal, the healing takes place immediately. Normal healing takes place over time, at a rate of 20 points a day. A successful diagnosis skill check adds a bonus of +20% to the success of the treatment, drug, herbalism, or surgery skills. With a successful drug or herbalism skill check, the regimen boosts the rate of healing by another 30 points a day. A successful treatment or surgery skill check adds a bonus of another 30 points a day. You can't use certain skills in combination. For instance, surgery and treat work with different methods in a similar manner. Thus they cannot be used on the same person at the same time. The same holds true for drug and herbalism. The maximum natural healing rate, therefore, is 80 points a day. This assumes normal healing (20), plus either drug or herbalism, plus either surgery or treatment (+30). Normal healing requires a minimum of seven hours of sleep per night and non-strenuous work for the duration. Without both of these conditions being met, no healing will occur.

ARMOR

Armor in StarCluster works to prevent you from being hit. The classes of armor are:

Skin The base condition. No armor, or very little.

Hide An armor made from leathers of various sorts.

Ballistic A somewhat tougher to hit armor, impact resistant and ablative.

Steel This armor is made of steel, usually in links

Plate Also made from steel, this armor is made in large plates.

Ceramic Fiber reinforced ceramic composite armor. May be powered.

Magic Only available on Jalan, this armor is made of steel plates that have been enhanced by magic.

Plasteel Hullmetal armor, very dense. May be powered.

Chromskin Armor designed to deflect beam weapons. Useless against anything else.

Wicker Light and flexible armor, excellent against arrows and darts, but mostly useless against other things.

CHECKS FOR TASKS WITH NO SKILL

There are several different methods used to determine the chance of success of a character who needs to use a skill he does not have. There are differences between the methods, and we can give some guidelines to follow:

- When a character is attempting a task for which there is an in-game skill, but the character does not have it, use a zero level skill check, where you roll the governing attribute plus attribute modifiers or less on %d. This is fine for difficult tasks, but for simpler tasks you will probably want to give a healthy bonus modifier of +5 to +20 at your discretion.
- When the character is attempting a task for which there is no in-game skill, but the character was employed in a profession that would have some call to use that skill or a related skill occasionally, use the Employment check method. You could just assign arbitrary numbers, or you could use something like governing attribute + 3X years spent in that profession.
- When the character is attempting a task for which there is no in-game skill, and the character would realistically not know much about the skill, use an Attribute Check at X1 - X4 depending on the ease or difficulty of the skill. Remember that Attribute checks have no modifier for high governing attribute.

Remember, if you feel that in the given situation a different check would be more suitable, go with your instincts. These are guidelines, not hard and fast rules. We laid out these several methods to give GMs a choice, as we felt that the GMs, who know more about the given situation than we ever could, would be the best ones to decide.

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WEAPONS AND SKILLS

The "Skill Required" column in the Equipment: Weapons guide refers to the skill required to wield the weapon effectively. Anyone can pick up a Molecular Sword and whack at things with it, but it takes real skill to use effectively. A person using a weapon uses it at the lowest level of the appropriate skill unless their skill level meets or exceeds the skill required to wield the weapon effectively. For example, Margaret, with a skill of blade+3, attempts to wield a Molecular Sword, which requires a skill level of blade+4. Margaret will be effectively blade+1 while using the Molecular Sword until her blade skill is at least blade+4. At that point, Margaret can use the Molecular Sword to it's full potential and has an effective skill of blade+4 with the Molecular Sword. Damage is prorated to the level of skill the weapon wielder possesses. For instance a sword has a damage rating of +15 and requires a skill level of blade+2. The damage is divided by the level and rounded down, so that the sword has a damage rating of +7 in the hands of a person with a skill level blade+1 and a damage rating of +15 in the hands of a person with a skill level of blade+2. To return to Margaret, our example from before, she has the following to hit and damage ratings at various skill levels:

At 15 Margaret gets blade+1, making her a blade+1. She uses a Molecular Sword with a 45% chance to hit and a damage of +10
At 18, Margaret gains a blade+1, making her a blade+2. She is still 45% to hit and her damage is now +20
At 22, Margaret gains a blade+1, making her a blade+3. She is still 45% to hit and her damage is now +30
At 30, Margaret gains another blade+1, making her a blade+4. She is now 60% to hit, and her damage is the full +40, which is the maximum damage with this weapon.

People with no skill in the appropriate weapon type inflict damage as if at the character were at skill level +1, but halved.

For example:

Before she was 15, Margaret wielded a Molecular Sword at a damage rating of $(+10)/2$ or +5.

AUTOMATIC FIRE

Automatic fire weapons such as assault rifles, machine guns, and submachine guns can fire more than one bullet with each pull of the trigger. When using automatic fire weapons, there are three possible modes of operation:

SINGLE SHOT:

When using single shot mode, one bullet for each pull of the trigger. This is treated exactly the same as a normal rifle or pistol. Assault rifles and submachine guns can use single shot modes.

BURST FIRE:

With burst fire, the weapon fires three rounds with each pull of the trigger. This gives the best compromise between ability to hit and damage. One roll of the dice is made. The first round is at -20% to hit, the second at -40%, and the third at -60%. For example, Bob hits skin at 85%. He rolls a 35. The target number of 85 is dropped 20 for the first round for a result of 65, which is higher than the roll, so the first round hits. The second round fired is at -40, resulting in a target number of 45, which again is higher than the roll of 35, so the second round also hits. The third round is at -60, resulting in a target number of 25, which is lower than the roll of 35, so the third round misses. Assault rifles, submachine guns, and machine guns can use Burst Fire.

FULL AUTOMATIC (SUPPRESSIVE) FIRE

Full automatic fire is generally used to pin down the enemy in heavy cover, giving them substantial penalties in firing. It is primarily a defensive option, but if the fire happens to hit an unprotected human, the results are generally lethal. For example, a machine gun is pinning down a small group of three in a rockpile. They are safe as long as they stay under cover. If one of the three breaks cover, a roll to hit is made by the machine gunner. On a hit, 1d10 rounds hit the target. If a machine gun is used against unsuspecting targets out in the open, cover rules are not used for the first round. Full automatic fire is very useful against vehicles. Submachinegun rounds cannot penetrate any armor, while machine gun rounds can penetrate light armor.

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GRENADES

Grenades burst in an area of effect 10 feet (approx. 3 meters) in diameter. The character using the grenade picks a particular target. On a hit, the target suffers the grenade's standard damage. If any other character is within the area of effect, and the number rolled for the original hit would hit that other character with a -30 penalty, that character is also hit. Cover rules apply, but the cover must be between the character and the blast.

For example, Joe throws a grenade onto a group of three enemy in the wood. He has a target number of 65% with grenades, and hits the target with a roll of 20. The target number of 65 -30 is 35, which is above his roll of 20, so both other characters in the radius of effect are also hit. The trees provide some cover, so each of the three characters make core rolls. The first roll, for the target, fails, as does the second, but the third cover roll succeeds. Thus targets one and two are hit by the blast, while a tree happens to be between 3 and the blast, and thus he suffers no damage.

Other area of effect weapons such as mines, molotov cocktails, artillery fire, etc. use the same process as above, varying in the radius of their area of effect and the damage suffered on a hit. Area of effect weapons can be smothered at great risk. A character can throw herself on a grenade if within the area of effect. If she does, the character suffers 4 times the damage she would normally with no chance of cover. This does protect any others in the area of effect from the blast. Throwing oneself on a grenade is an act of great heroism, and few such heroes survive.

GENERAL KNOWLEDGE AND LANGUAGES

There are a lot of situations in which the character has unquantifiable knowledge, such as general geographic knowledge of an area or perhaps cultural knowledge of a people. In these cases, the GM should decide if the player knows anything concerning the situation based on the character's background, and how much the character knows. The level of knowledge can be placed as 4 basic categories: None, Acquainted, Competent, and Fluent.

None means the character has no knowledge or only the most rudimentary knowledge of a situation.

Acquainted means the character has some knowledge, but that knowledge is sparse and incomplete.

Competent means that the character's knowledge is quite good, and the character can be expected to know quite a bit concerning the subject.

Fluent means that the character knows anything a native of the area or equivalent would know. Fluent does not mean the character knows everything.

These categories should be used for languages as well. The skill of linguistics is the study of languages from the inside, as it were, so that one skilled in linguistics can learn languages quickly from first principles, and can decipher languages because the roots of the language are known and the differences can be deduced. Most people cannot learn languages from these operational principles, they learn them from doing. The GM should decide what languages the characters speak, and at what level of competence.

A person with a Fluency in a language is automatically rated competent in any nonnative dialect of that language, and is automatically rated as Acquainted in related languages. For example, using Earth languages, a Fluency in Standard German means the person is automatically Competent in the Bavarian dialect and is automatically Acquainted with Dutch. This simulates the fact that root words can be similar enough to be understandable between languages. A German speaker would be able to - say - ask where the bathroom is and be generally understandable to a Dutch speaker with a bit of effort on both parts, but would be unable to have anything approaching a normal conversation. With Competence, the people involved can communicate normally, but many subtleties are lost. No one would mistake a Competent person as a native. With Fluency, all shades of meaning come through, true translations become possible, and one can pass as a native, all other things being equal.

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LEVELS OF MASTERY

Levels of mastery are skill levels at the multiples of +5 (+5, +10, +15, etc.) Each level of mastery gives the character repeated attempts at success. In combat, this translates to multiple attacks per round. A character with a single level of mastery gains a second attack, while one with double mastery (+10) has three attacks per round. Repeated attacks wouldn't mean much for - say - a biology check, so for non-combat skills, each level of mastery gains the character a re-roll if the previous roll fails.

For example, a character with a skill level of +11 not only has a base success chance of 95%, but if the first roll is a failure, the character has 2 re-rolls to make it. A character with a double mastery should almost never fail at that skill.

SPACEPORTS

There are 4 general types of spaceport, types A, B, C, and D. A better explanation of each is in order.

Spaceport Type A is a ground spaceport with no orbital component, and with refueling capabilities appropriate to the Tech Level of the world or lower.

Type A spaceports can be anything from a cleared field in a primitive world to a complex like the NASA installation at Cape Canaveral or Baikonur Cosmodrome. The ability of the spaceport to service the arrivals is dependent on the Tech Level of the world. This type of spaceport is typical on backward or primitive worlds.

Spaceport Type B is a ground spaceport with no orbital component, and with refueling capabilities of a Tech Level 9 or 10 world, i.e. Matter-Anti-Matter, no matter what the Tech Level of the world is.

Type B spaceports are generally small but well equipped, high tech level ports. This is because the spaceport has been imported from a higher tech world. These installations are typical on Thieves' Worlds and on Hunting Planets, both of which get much traffic from high tech worlds in comparison to the size of the population.

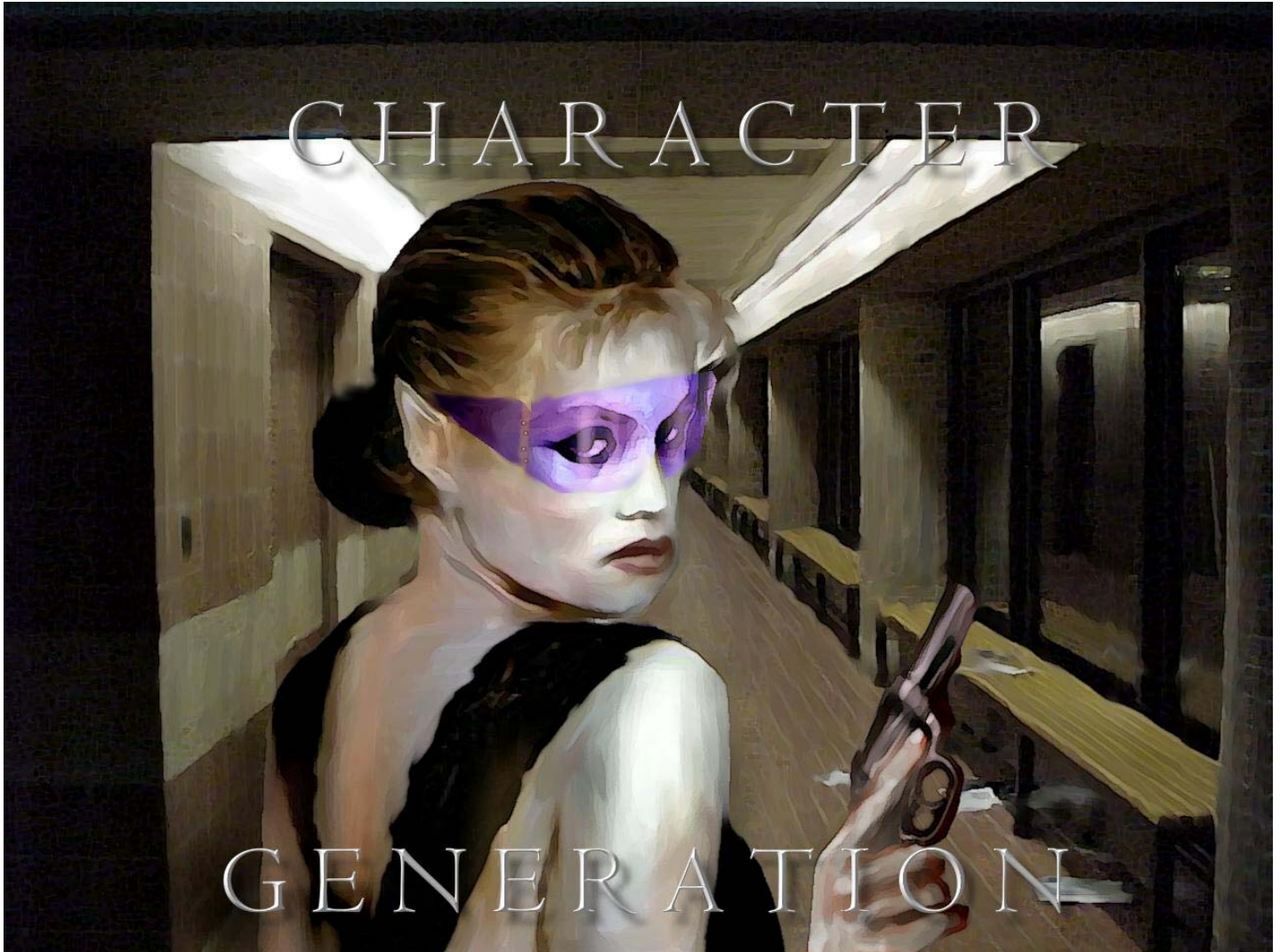
Spaceport Type C is an orbital spaceport with no ground component.

Type C spaceports are usually found around colony worlds, as the colony ship or ships generally remain in orbit around the colony after the colonists land on the new world, serving as the base of a starport, with the landers now functioning as shuttles. Older colonies have substantially modified these original colony ships as their needs have grown, but the core is still there, even if it has been dismembered for component parts.

Spaceport Type D is a spaceport with both orbital and ground components.

Type D spaceports are found on and around worlds of Tech Level 8 and above with substantial populations, in other words, States or Colonizers. In busy systems like Gloria, there might be half a dozen spaceports on the ground or in orbit, some very specialized in what traffic they care for. One station might tend only to fission craft, with special safeguards against the radiation, or another might only work with asteroid mining craft. Each world is different in it's needs, and thus in the exact distribution of services.

STARCLUSTER - CHARACTER GENERATION



STARCLUSTER

GUIDE TO CHARACTER GENERATION

BY CLASH BOWLEY

CHARACTER GENERATION - 15 -

STARCLUSTER - CHARACTER GENERATION

CHARACTER GENERATION PROCEDURE TO BEGIN

The first thing to determine is the character's homeworld. This determines the character's birth Tech Level, and everything else depends on that. The homeworld will be assigned to you by your GM. The GM will also work with you to determine your character's "Mother's Milk" skills, based on the character's homeworld and particular background - the character's birth rank is important here. These Mother's Milk skills are skills the character has learned before the age of 10. They can include metaskills as well as normal skills. Every character has 4 of these Mother's Milk skills before the age of 10.

It should be noted that the character can possibly move around from world to world, thus changing tech levels, after the character is born. This should be worked out with your GM as you are preparing the character for play.

The GM will give you an age range at which it is appropriate for the character to begin play. As the character ages, wealth increases and skills increase, but physical stats decline, so what might be challenging for a character in her late twenties could be boring for a character in her mid fifties. The GM has reasons for recommending a particular age range.

Adventures typically define a year in the character's life, even if they only take a few weeks to complete. The balance of the year, the character should be doing whatever characters do in their boring hum-drum lives. At the end of the adventure, the character should age another year on the worksheet. The GM will decide which is the appropriate profession to describe what the character has done for the adventure, and you can then roll on the appropriate skill tables, or choose a metaskill, as you wish. If a Physical Deterioration is appropriate, take care of that just as you would while generating the character.

One thing to remember is that your character is having adventures all the time, even while you are generating him. You are just not acting those adventures out. There is no difference between a year which has been generated and one which has been acted out. You can generate a character to age 25, take part in an acted out adventure for year twenty-six, generate from 27 to 41, and act out another adventure for year 42.

Another thing to remember is that the character is not just arbitrarily drifting from job to job. **When a character changes employment, it can be thought of as a movement within a larger career.** For instance, if a character goes through a Seminary and becomes a Priest, then after a few years becomes a Social Worker and later on a Teacher, doesn't mean she ever stopped being a Priest, unless you want it to mean that. Your character can also always return to professions you have left, retaining all his promotions and pay.

STARCLUSTER - CHARACTER GENERATION

A: RANDOM METHOD

I ROLL FOR INITIAL CHARACTERISTICS AND CASH

STRENGTH 2D6

(i.e. 2 six-sided dice added together)

Strength is the character's muscular prowess. Strength is used in Melee, Blade, and Unarmed combat. Strength is usually abbreviated as **STR**

COORDINATION AND AGILITY 2D6

Roll 2d6 - Put the same result under both characteristics.

Coordination is the linking of see, will, and do, quickness and deftness in fine motor skills. Coordination is used in Bow, Gun, and Beam combat. Coordination is usually abbreviated as **COOR**

Agility. Agility is acrobatics, gymnastics and whole body movement. Agility helps your character with running, jumping, climbing, and any other activity using the whole body. Agility is usually abbreviated as **AGY**

ENDURANCE 2D6

Roll 2d6

Endurance is the ability to keep going. Endurance helps your character with tasks that are repetitive, long lasting, or performed under adverse circumstances. Endurance is usually abbreviated as **END**

IQ %D

(Roll 2 ten sided dice and read one die as tens, the other as ones. a 9 and a 4 would be 94. A result of 00 is always read as 100) on Table A, Column 1 on the appropriate page for the character's Tech Level. Look up the result in the IQ column. **IQ** (Intelligence Quotient) is smarts, problem solving, the ability to see significance and pattern.

PSI %D

Roll on Table A, Column 2 on the same page you looked up your character's IQ.

Psionics are mental abilities which affect the world directly. The PSI number is the potential to use psionic energies - the number of times per day that your character can use psionic skills. Psionic points regenerate 24 hours after being used. Psionics is usually abbreviated as **PSI**

RANK %D

Roll on Table A, Column 3 - Starting cash is found here in column 4, in the same row as the character's rank in society. This is what your family was doing when you were born. This strongly influences the character's upbringing and education, especially where expenses are concerned.

CHARISMA 2D6

Charisma. Attractiveness, persuasiveness. Half physical, half mental. The proportion starts mostly as physical, but increasingly becomes mental as the character ages. Charisma is usually abbreviated as **CHAR**

STARCLUSTER - CHARACTER GENERATION

These are the character's abilities at the age of ten. The character is not finished growing, and will physically change as age and experience modify the character.

II CHARACTER IS AGE 10. TRY FOR SECONDARY SCHOOL - GET SKILLS - 6 YEARS

In the Schools Section, select a secondary school you would like your character to go to. This is what your character will be doing for the next six years. If your character has the money and meets the minimum requirements, great. Deduct the money from the character's starting total and roll six times on the appropriate skills table, once for each year. If you have the money but don't meet the minimum requirements, try for a waiver. Roll the amount listed or more, and the requirements are waived for you. Same if you meet the minimum requirements, but don't have the cash. Remember to add +1 to your die roll for each point of IQ over 120. High IQ is a big asset here. The character may waive either the cost or the prerequisite (if allowed), but not both. If you don't make it into any secondary schools, or you just don't feel the character would have, use the "No School" column. The character receives one skill per year by rolling a 10 sided die (d10) and comparing the result to the appropriate Skill table listed under the school taken. If the result is a bonus to a characteristic rather than a skill (i.e. strength+1 or coordination+2, etc.) modify the appropriate characteristic in lieu of gaining a skill. If the character receives a skill for the first time, that skill is at level one (i.e. blade+1). If the character receives a skill already gained, that skill level is modified upward (i.e. blade+2).

In lieu of taking the skill rolled on the tables, the character may choose the metaskill associated with that school instead, or may choose among the social skills available.

III COLLEGE & GRAD SCHOOL

Basically the same procedure as II above, but select from the colleges available instead. **Unlike secondary schools, the character can go to College or Grad School at any time, its just more usual to go at age 16. You can also go to a second college later on.**

If you select a college with no cost, that means you must spend the six years **after** you leave college/grad school in service to those who sponsored your education. If an employment lists that school as a prerequisite, entering that employment for six years is considered full payment of your educational debt. If you go to both college and grad school by this means, both debts must be fulfilled in the order you incurred them. During these six years of employment, you do not change your employment.

In lieu of taking the skill rolled on the tables, the character may choose the metaskill associated with that school instead, or may choose among the social skills available.

IV EMPLOYMENT

If the player does not wish for the character to go to higher education (i.e. college and/or grad school) or the character does not qualify or fails all waiver rolls, the character goes immediately into employment.

Select a profession from the appropriate section. If you meet the prerequisites, you are in that profession as long as you wish to stay. If you do not meet the prerequisites, you may attempt a waiver roll. Each year in that employment, the character receives one skill by rolling a six-sided die (d6) - possibly modified- and comparing the result to the Skill tables listed for that profession. Each employment has at least two Skill sets available, and the player may choose which skill table the roll applies to after rolling.

In lieu of taking the skill rolled on the tables, the character may choose the metaskill associated with that

STARCLUSTER - CHARACTER GENERATION

profession instead, or may choose among the social skills available. The character may leave an employment at any time, and may rejoin the employment at a later date. However, if the character does not meet the minimum requirements, the player must again roll waivers.

V ROLL EVERY 2 YEARS IN PROFESSION FOR PROMOTION.

01-75 no promotion

76-00 promotion

With each promotion, your character's level within that profession increases. Note this on your character worksheet in the following fashion: The first year in a profession is always level one. This is notated so, using the profession of Psiman as an example: Psiman/1/1. The second year is also always at level one, and is notated thusly: Psiman/2/1. Note the years in the profession come first, then the level within the profession. At the end of the second year in the profession, roll for promotion. A %d result of 75 or higher gains the character a promotion. Note the promotion under "promotions" on the worksheet with a "yes", and the next year, note the promotion as follows: Psiman/3/2.

Pay is increased by promotion. On the Employment tables on the right is a number followed by a "J" followed by another number, as follows: "50J3". The initial number is the initial pay at level one per year, less living expenses. The "J" signifies "Jump", and the last number is the "Jump Number". To find the pay at subsequent levels, multiply the initial pay times the jump number, and add it to the current pay. Thus, if the Pay scale is "50J3", the pay for the first level is 50cr per year. The number increases with each promotion thusly: $50 \times 3 = 150$, so the pay for the first 4 levels would be 50, 200, 350, and 500.

Promotion also signifies a greater understanding of the profession pursued. **At level 3, which signifies "Master" level, the character receives an optional +1 on skill rolls for that profession. This plus may be used or not as the player decides.** Thus a d6 result of "5" may be a five or a six at the players discretion. This is the only way to roll a 7 and gain the +2 intensive skill increase.

VI ROLL EVERY 4 YEARS STARTING AT AGE 34 FOR PHYSICAL DISABILITY

01-05	-1 str	41-65	-1 str, -1 end
05-10	-1 coor	66-90	-1 coor, -1 agy
11-20	-1 agy	91-00	-1 str, -1 coor,
20-40	-1 end		-1 agy, -1 end

This simulates the debilitating effects of aging on the character. **This roll must be taken even after characters join play, and can never be avoided.** The effects of aging can be mitigated or reversed by the character finding employment which increases characteristics, but that comes in lieu of gaining skills.

Boost is a drug available at TL 9 which slows down aging. It stays in effect for 12 years, and allows the character to physically age at 1/3 the pace normally allotted. Thus the player rolls one physical disability roll every of 12 years, instead of every 4 years. Boost costs 1000cr per 12 year dose at TL9, and 100cr per dose at TL10. It is available on the black market at TL8 at 10,000cr, and goes up in price by a factor of 10 per tech level downward, thus 100,000cr at TL7, 1,000,000cr at TL6, and 10,000,000cr at TL5. It is, of course, not available for export to lower tech worlds, and must be obtained by illegal means, which is why it is so expensive.

STARCLUSTER - CHARACTER GENERATION

A: (ALMOST) NON-RANDOM METHOD

I PLACE INITIAL CHARACTERISTICS AND CASH

You have 35 points to apportion between Strength, Coordination, Agility, Endurance, and Charisma. These stats can be used as is. If the GM wants more heroic stature characters, bonus points may be given.

You have 150 points to apportion between IQ, PSI, and RANK. These are raw scores, and should be looked up on the appropriate table for your Tech Level. For example an IQ score of 50 at Tech Level 4 is equal to an IQ of 105.

Strength is the character's muscular prowess. Strength is used in Melee, Blade, and Unarmed combat. Strength is usually abbreviated as **STR**

Coordination is the linking of see, will, and do, quickness and deftness in fine motor skills. Coordination is used in Bow, Gun, and Beam combat. Coordination is usually abbreviated as **COOR**

Agility. Agility is acrobatics, gymnastics and whole body movement. Agility helps your character with running, jumping, climbing, and any other activity using the whole body. Agility is usually abbreviated as **AGY**

Endurance is the ability to keep going. Endurance helps your character with tasks that are repetitive, long lasting, or performed under adverse circumstances. Endurance is usually abbreviated as **END**

IQ (Intelligence Quotient) is smarts, problem solving, the ability to see significance and pattern.

Psionics are mental abilities which affect the world directly. The PSI number is the potential to use psionic energies - the number of times per day that your character can use psionic skills. Psionics is usually abbreviated as **PSI**

Rank is what your family was doing when you were born. This strongly influences the character's upbringing and education, especially where expenses are concerned.

Charisma is attractiveness and persuasiveness, and is half physical and half mental. The proportion starts mostly as physical, but increasingly becomes mental as the character ages. Charisma is usually abbreviated as **CHAR**

These are the character's abilities at the age of ten. The character is not finished growing, and will physically change as age and experience modify the character.

II CHARACTER IS AGE 10. TRY FOR SECONDARY SCHOOL - GET SKILLS - 6 YEARS

In the Schools Section, select a secondary school you would like your character to go to. This is what your character will be doing for the next six years. If your character has the money and meets the minimum requirements, great. Deduct the money from the character's starting total and continue.

- If you have the money but don't meet the minimum requirements, try for a waiver. Roll the amount listed or

STARCLUSTER - CHARACTER GENERATION

more, and the requirements are waived for you. Same if you meet the minimum requirements, but don't have the cash. Remember to add +1 to your die roll for each point of IQ over 120. High IQ is a big asset here. The character may waive either the cost or the prerequisite (if allowed), but not both. If you don't make it into any secondary schools, or you just don't feel the character would have, use the "No School" column.

The character receives one skill per year from the list of skills available, with any 3 of the skills doubled.

EXAMPLE:

Your character chooses Exclusive Private School. You choose as skills gun, IQ+5, blade, Rank, coordination and charisma. You can double any 3 of these, so you choose to double gun, coordination and charisma for a total result of:

gun+2, IQ+10, blade+1, Rank+1, Coordination+2, and Charisma+2.

If the result is a bonus to a characteristic rather than a skill (i.e. strength+1 or coordination+2, etc.) modify the appropriate characteristic in lieu of gaining a skill. If the character receives a skill for the first time, that skill is at level one (i.e. blade+1). If the character receives a skill already gained, that skill level is modified upward (i.e. blade+2).

- In lieu of taking the skill rolled on the tables, the character may choose the metaskill associated with that school instead, or may choose among the social skills available.

III COLLEGE & GRAD SCHOOL

Unlike secondary schools, the character can go to College or Grad School at any time, its just more usual to go at age 16. You can also go to a second college later on.

If you select a college with no cost, that means you must spend the six years *after* you leave college/grad school in service to those who sponsored your education. If an employment lists that school as a prerequisite, entering that employment for six years is considered full payment of your educational debt. If you go to both college and grad school by this means, both debts must be fulfilled in the order you incurred them. During these six years of employment, you cannot change your employment.

The character receives one skill per year for the next 4 years from the list of skills available, with any 1 of the skills doubled.

EXAMPLE:

Your character chooses Exclusive College. You choose as skills biology, physics, gun, and chemistry. You can double any 1 of these, so you choose to double physics for a total result of:

biology+1, physics+2, gun+1, and chemistry+1

- In lieu of taking the skill rolled on the tables, the character may choose the metaskill associated with that

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school instead, or may choose among the social skills available.

Graduate Schools work in exactly the same manner.

IV EMPLOYMENT

If the player does not wish for the character to go to higher education (i.e. college or grad school) or the character does not qualify or fails all waiver rolls, the character goes immediately into employment.

Select a profession from the appropriate section. If you meet the prerequisites, you are in that profession as long as you wish to stay. If you do not meet the prerequisites, you may attempt a waiver roll.

Each year the character receives one skill from the Available Skills list for that profession. Every six years in a profession, the one skill taken during those years is doubled - i.e. a choice of "streetwise" becomes "street-wise+2"

- In lieu of choosing a skill from the skills available list, the character may choose the metaskill associated with that profession instead, or may choose among the social skills available.

V ROLL EVERY 2 YEARS IN PROFESSION FOR PROMOTION.

01-75 no promotion

76-00 promotion

With each promotion, your character's level within that profession increases. Note this on your character worksheet in the following fashion: The first year in a profession is always level one. This is notated so, using the profession of Psiman as an example: Psiman/1/1. The second year is also always at level one, and is notated thusly: Psiman/2/1. Note the years in the profession come first, then the level within the profession. At the end of the second year in the profession, roll for promotion. A %d result of 75 or higher gains the character a promotion. Note the promotion under "promotions" on the worksheet with a "yes", and the next year, note the promotion as follows: Psiman/3/2.

Pay is increased by promotion. On the Employment tables on the right is a number followed by a "J" followed by another number, as follows: "50J3". The initial number is the initial pay at level one per year, less living expenses. The "J" signifies "Jump", and the last number is the "Jump Number". To find the pay at subsequent levels, multiply the initial pay times the jump number, and add it to the current pay. Thus, if the Pay scale is "50J3", the pay for the first level is 50cr per year. The number increases with each promotion thusly: $50 \times 3 = 150$, so the pay for the first 4 levels would be 50, 200, 350, and 500.

VI ROLL EVERY 4 YEARS STARTING AT AGE 34 FOR PHYSICAL DISABILITY

01-05	-1 str	41-65	-1 str, -1 end
05-10	-1 coor	66-90	-1 coor, -1 agy
11-20	-1 agy	91-00	-1 str, -1 coor,
20-40	-1 end		-1 agy, -1 end

This simulates the debilitating effects of aging on the character. **This roll must be taken even after characters join play, and can never be avoided.** The effects of aging can be mitigated or reversed by the character finding employment which increases characteristics, but that comes in lieu of gaining skills.

Boost is a drug available at TL 9 which slows down aging. It stays in effect for 12 years, and allows the character to physically age at 1/3 the pace normally allotted. Thus the player rolls one physical disability roll

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every of 12 years, instead of every 4 years. Boost costs 1000cr per 12 year dose at TL9, and 100cr per dose at TL10. It is available on the black market at TL8 at 10,000cr, and goes up in price by a factor of 10 per tech level downward, thus 100,000cr at TL7, 1,000,000cr at TL6, and 10,000,000cr at TL5. It is, of course, not available for export to lower tech worlds, and must be obtained by illegal means, which is why it is so expensive.

VII SOCIAL SKILLS

At any year, the character may choose one from the following social skills, or a professional metaskill, or a skill rolled on the skill table. The professional metaskills and skill tables are listed under the particular school or profession. Social skills are skills unrelated to any particular employment, and thus open to any character at any time. Remember, choosing a Social Skill is in place of rolling on the skill tables, not in addition.

SOCIAL SKILLS LISTING:

Convince	Goad	Entice
Endear	Engrace	React
Adapt	Operate	Overdo

BOOK OF JALAN CHARACTERS

Book of Jalan characters are a special case within StarCluster. Jalan is an interdicted world in the Anson star system. On Jalan, Psionics have developed into a true magic. Book of Jalan characters are not allowed out within the Cluster, as the Cluster humanoids fear the disruptive use of Magic should the Jalan humans be allowed contact with the rest of the Cluster. As Jalan is at Tech Level 4, they can legally do this as a Primitive world. Once Jalan develops a sustainable steam based economy, it moves into tech level 5, and things get very dicey in legal terms. Your GM is, of course free to do anything she wants, including letting Book of Jalan characters free within the Cluster either as a special case or as a general rule. One interesting option for interested GMs might be to allow all Cluster humanoids access to Jalan-style magic.

When you have reached the age you wish to play at, the character needs to be equipped, then play can begin.

STARCLUSTER - CHARACTER GENERATION

STAR CLUSTER CHARACTER GENERATION TABLES

ROLL ONCE EACH FOR IQ, PSI, AND RANK

TABLE AA: IQ, PSI, AND RANK FOR ADVANCED (TECH LEVEL 8+) CULTURES

%d roll	IQ	PSI	Rank	Rank #	Cash
01-02	70	0	Street Orphan	1	10cr
03-05	80	0	Poverty Stricken	2	15cr
06-10	85	0	Very Poor	3	20cr
11-16	90	0	Welfare Family	4	25cr
12-18	95	0	Poor Family	5	30cr
19-25	100	0	Working Class last child	6	40cr
26-27	105	0	Farm Child	7	45cr
28-30	107	1	Working Class - mid child	8	55cr
31-35	109	1	Working Class Small Family	9	60cr
36-38	111	1	Working Class - only child	A	65cr
39-40	113	1	Large Mid Class Family	B	70cr
41-47	115	2	Medium Mid Class Family	C	75cr
48-55	117	2	Small Mid Class Family	D	80cr
56-57	119	2	Military Family - Field Rank	E	85cr
58-65	121	2	Small Trading Family	F	95cr
66-68	123	2	Poor Aristocratic Family	G	100cr
69-72	125	3	Owens Large Mfg Company	H	200cr
73-80	127	3	Planetary Trading Family	I	300cr
81-82	129	3	Military Family General Rank	J	350cr
83-88	131	4	Agribusiness Family	K	400cr
89-90	133	4	Rich Aristocratic Family	L	500cr
91-96	135	4	Interstellar Trading Family	M	700cr
97-99	137	5	Family Own Huge Conglom	N	900cr
00	140	5	Planetary Royalty	O	1000cr

STARCLUSTER - CHARACTER GENERATION

STAR CLUSTER CHARACTER GENERATION TABLES

ROLL ONCE EACH FOR IQ, PSI, AND RANK

TABLE AB: IQ, PSI, AND RANK FOR BACKWARD (TECH LEVEL 5-7) CULTURES

%d roll	IQ	PSI	Rank	#	Cash
01-09	70	0	Street Orphan	1	10cr
10-20	80	0	Poverty Stricken	2	15cr
21-25	85	0	Very Poor	3	20cr
26-30	90	0	Welfare Family	4	25cr
31-35	95	0	Poor Family	5	30cr
36-39	100	0	Working Class - last child	6	40cr
40-42	105	0	Farm Child	7	45cr
43-47	107	1	Working Class - mid child	8	55cr
48-50	109	1	Working Class Small Family	9	60cr
51-53	111	1	Working Class - only child	A	65cr
54-59	113	1	Large Mid Class Family	B	70cr
60-63	115	2	Medium Mid Class Family	C	75cr
64-67	117	2	Small Mid Class Family	D	80cr
68-71	119	2	Military Family - Field Rank	E	85cr
72-75	121	2	Small Trading Family	F	95cr
76-79	123	2	Poor Aristocratic Family	G	100cr
80-83	125	3	Owens Large Mfg Company	H	200cr
84-87	127	3	Wealthy Trading Family	I	300cr
88-91	129	3	Military Family General Rank	J	350cr
92-93	131	4	Agribusiness Family	K	400cr
94-95	133	4	Rich Aristocratic Family	L	500cr
96-97	135	4	Rich Trading Family	M	700cr
98-99	137	5	Family Own Conglom	N	900cr
00	140	5	Royalty Cadet Branch	O	1000cr

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STARCLUSTER CHARACTER GENERATION TABLES

ROLL ONCE EACH FOR IQ, PSI, AND RANK

Table A: IQ, PSI, and Rank for **Primitive (Tech Level 1-4) Cultures**.

%d roll	IQ	PSI	Rank	#	Cash
01-09	70	0	Street Orphan	1	10cr
10-20	80	0	Poverty Stricken	2	15cr
21-25	85	0	Very Poor	3	20cr
26-30	90	0	Family on Charity	4	25cr
31-35	95	0	Poor Family	5	30cr
36-39	100	0	Working Class - last child	6	40cr
40-65	105	0	Farm Child	7	45cr
66-67	107	1	Working Class - mid child	8	55cr
68-69	109	1	Working Class Small Family	9	60cr
70-71	111	1	Working Class - only child	A	65cr
72-75	113	1	Large Mid Class Family	B	70cr
76-77	115	2	Medium Mid Class Family	C	75cr
78-79	117	2	Small Mid Class Family	D	80cr
80-81	119	2	Military Family - Field Rank	E	85cr
82-83	121	2	Small Trading Family	F	95cr
84	123	2	Poor Aristocratic Family	G	100cr
85	125	3	Owns Large Mfg Company	H	200cr
86-88	127	3	Large Trading Family	I	300cr
89	129	3	Military Family General Rank	J	350cr
90-95	131	4	Rich Farming Family	K	400cr
96	133	4	Rich Aristocratic Family	L	500cr
97	135	4	Rich Trading Family	M	700cr
98-99	137	5	Family Own Ship Line	N	900cr
00	140	5	Royalty Cadet Branch	O	1000cr

STARCLUSTER - CHARACTER GENERATION

STAR CLUSTER CHARACTER GENERATION TABLES FOR TECH LEVELS 7-10

WAIVER APPLIES TO EITHER COST OR PREREQUISITES, NOT BOTH.
1 PER POINT OF IQ OVER 120

TABLE 1: SECONDARY SCHOOLS FOR TECH LEVEL 7-10

Cost	School	Prerequisites	Skill Table	%d Waiver	Metaskill
200cr	Exclusive Private	Rank I+	I	90%	converse+1
150cr	Private Prep	Rank G+	II	80%	appear+1
70cr	School for the Arts	COOR 10+, CHAR 11+	III	80%	create+1
50cr	Tech	COOR 9+, IQ 100+I	V	70%	analyze+1
35cr	Agricultural	Rank K or 7, STR 10+	V	70%	grow+1
200cr	Psionics	PSI 3+	VI	85%	focus+1 (waive cost only)
15cr	Military	(3 of 4) STR, COOR, AGY, END 8+	VII	80%	discipline+1
10cr	High	Rank 6+	VIII	90%	relate+1
0cr	No School	None	IX	N/A	obtain+1

TABLE 2: COLLEGES FOR TECH LEVEL 7-10

Cost	College	Prerequisites	Skill Table	%d Waiver	Metaskill
300cr	Exclusive	Private School	1	90%	organize+1
150cr	Engineering	Tech or Mil School	2	80%	design+1
300cr	Psionics	PSI 4+ or Psi School	3	90%	focus+1 (waive cost only)
80cr	Computer	Tech, High, or Mil School	4	85%	analyze+1
75cr	Agricultural	Agri or High School	5	80%	grow+1
0cr*	Military	Mil School or Rank E or J	13	80%	organize+1
0cr**	Thieves	coor 10+ or agy 10+ or Rank D	E	75%	appear+1
0cr**	Journeyman Thief	coor 10+ or agy 10+ or Rank D	14	75%	obtain+1
0cr***	Seminary	Any School	P	70%	relate+1
45cr	Acting	Art or High School or char 10+	6	75%	appear+1
100cr	Liberal Arts	Private, High, or Art School	7	70%	relate+1
45cr	Art	Art or High School	AH	80%	create+1
50cr	Music	Art School	AI	80%	embellish+1
0cr	No College -Work	None	N/A	N/A	see work
*	Become officer for 6 years				
**	Become apprentice thief for 6 years				
***	become priest for 6 years				

TABLE 3: POST-GRADUATE EDUCATION FOR TECH LEVEL 7-10

Cost	School	Prerequisites	Skill Table	%d Waiver	Metaskill
300cr	Medical School	Exc or Liberal Arts College	11	80%	repair+1
300cr	Law School	Exc or Liberal Arts College	8	80%	organize+1
0cr*	War College	Military College	9	90%	analyze+1
100cr	Science School	Computer College	10	75%	analyze+1
200cr	Business School	Rank F,H,I,K,M, or N	12	95%	sell+1

STARCLUSTER - CHARACTER GENERATION

TABLE 4: SCHOLASTIC SKILL TABLES FOR TECH LEVEL 7-10

1d10	Secondary Skill Tables								
Roll	I	II	III	IV	V	VI	VII	VIII	IX
1	IQ+10	IQ+5	charisma+1	program+1	strength+1	IQ+10	strength+3	IQ+3	IQ+3
2	IQ+5	IQ+3	charisma+2	program+2	strength+2	IQ+15	strength+2	strength+2	strength+2
3	program+1	coordin+1	program+1	IQ+5	strength+3	IQ+7	coordin+2	coodinr+1	coordin+2
4	charisma+1	strength+1	blade+1	IQ+10	endur+1	IQ+5	coordin+3	endur+1	endur+1
5	Rank+1	program+1	coordin+1	IQ+3	endur+2	IQ+3	endur+2	agility+1	agility+1
6	blade+1	agility+1	coordin+2	coordin+1	endur+3	endur+1	IQ+3	program+1	streetwse+1
7	gun+1	leader+1	agility+1	coordin+2	program+1	endur+2	gun+1	unarm+1	streetwse+2
8	leader+1	coordin+1	agility+2	coordin+2	IQ+3	program+2	gun+2	drugs+1	drugs+1
9	IQ+3	endur+1	endur+1	coordin+3	coordin+1	program+3	melee+1	streetwse+1	drugs+2
10	coordin+2	strength+2	endur+2	endur+1	agility+1	program+4	unarm+1	IQ+5	melee+1

2d6	College Skill Tables						
Roll	1	2	3	4	5	6	7
2	leader+1	leader+1	TK+1	IQ+3	planet+2	stwse+2	blade+1
3	blade+1	gun+1	TK+1	drives+1	minerol+1	stwse+1	stwse+1
4	gun+1	drives+1	heal+1	electron+1	chem+1	blade+1	charisma+1
5	charisma+1	physics+1	stun+1	program+1	biology+2	charisma+1	sociolgy+1
6	sociolgy+1	drives+2	shield+2	program+1	biology+1	charisma+1	charisma+1
7	biology+1	mechnic+1	shield+1	program+1	biology+1	charisma+1	biology+1
8	physics+1	mechnic+2	inter+1	program+1	biology+1	charisma+1	psyc+1
9	astronmy+1	program+1	inter+2	program+2	chem+1	blade+1	program+1
10	planet+1	program+2	stun+1	electron+1	chem+1	disguise+1	minerol+1
11	program+1	drives+1	pyr+1	gun+1	planet+1	drugs+1	drugs+1
12	IQ+3	IQ+3	kill+1	IQ+5	IQ+3	IQ+3	IQ+3

2d6	College Skill Tables						
Roll	8	9	10	11	12	13	14
2	law+2	sociolgy+2	sociolgy+2	IQ+5	IQ+3	IQ+3	IQ+10
3	law+1	leader+1	drug+2	treat+2	business+2	shgun+2	picking+2
4	sociolgy+1	strat+1	biology+1	drug+1	negotiate+2	gun+2	snare+2
5	charisma+1	tact+1	res+1	treat+1	negotiate+1	gun+1	gymnastics+1
6	charisma+1	shgun+1	biology+1	diagnose+1	business+1	lea+1	coordination+1
7	end+1	strat+1	chem+1	biology+1	business+1	strat+1	forgery+1
8	business+	tact+1	physics+1	surgery+1	writing+1	tact+1	sneaking+1
9	business+1	leader+1	physics+1	surgery+2	psych+1	shgun+1	picking+1
10	law+1	leader+2	end+1	diagnose+2	psych+2	lea+2	snare+1
11	law+1	tact+2	res+1	drug+2	business+2	tact+2	sneaking+2
12	IQ+5	IQ+10	IQ+10	IQ+10	IQ+5	strat+2	gymnastics+2

STARCLUSTER - CHARACTER GENERATION

STARCLUSTER CHARACTER GENERATION TABLES FOR TECH LEVELS 1-6

1 PER IQ OVER 120 ON ALL WAIVER ROLLS
WAIVER APPLIES TO EITHER COST OR PREREQUISITES, NOT BOTH.

TABLE 1: APPRENTICESHIPS, TECH LEVELS 1-6

Cost	Apprentice-ship	Prerequisites	Skill Table	%d Waiver	Metaskill
10cr	Hunter	endurance 8+	X	80%	focus+1
50cr	Smith	strength 10+, endurance 8+	XI	90%	repair+1
50cr	Mason	strength 8+, coordination 8+ or Rank 8	XII	75%	build+1
15cr	Entertainer	coordination 8+, charisma 10+	XIII	80%	appear+1
100cr	Artificer	coordination 8+, IQ 100+	XIV	70%	create+1
30cr	Farmer	Rank K or 7, strength 10+	XV	75%	grow+1
150cr	Mage	PSI 3+	XVI	75%	focus+1
				(waive cost only)	
100cr	Warrior	(3 of 4) strength, coordination, agility, endurance 8+	XVII	80%	discipline+1
10cr	Thief	coordination/agility 8+	XVIII	80%	obtain+1
0cr	No Apprentice	None	XIX	N/A	relate+1

TABLE 2: COLLEGES FOR TECH LEVEL 1-6

Cost	College or Journeyman	Prerequisites	Skill Table	%d Waiver	Metaskill
150cr	Col. of Science	Apprentice Artificer or IQ 120+	15	90%	analyze+1
100cr	Jour. Smith	Apprentice Smith or strength 11+, coordination 9+	16	80%	build+1
200cr	Mage Col	PSI 4+ or Apprentice Mage	17	80%	focus+1
			(waive cost only)		
0cr*	Military Col.	Apprentice Warrior or Rank E or J	18	80%	organize+1
100cr	Bard's Col.	Apprentice Entertainer or charisma 10+	19	75%	create+1
0cr***	Seminary Col.	Any Apprenticeship	20	70%	relate+1
75cr	Jour. Mason	Apprentice Mason or coordination 10+	21	70%	build+1
0cr**	Jour. Thief	coordination 10+ or agility 10+ or Rank D	22	75%	obtain+1
0cr*	Naval Col.	coordination 9+, endurance 9+ or Rank H	23	80%	organize+1
50cr	Col. of Artsc	coordination 9+, charisma 10+	24	80%	create+1
0cr	None -Work	None	Any	N/A	see work
*	Become officer for 6 years				
**	Become thief for 6 years				
***	become priest for 6 years				

TABLE 3: POST-GRADUATE EDUCATION FOR TECH LEVEL 1-6

Cost	School	Prerequisites	Skill Table	%d Waiver	Metaskills
300cr	Medical	College of Science	28	80%	repair+1
300cr	Law	College of Arts	26	80%	organize+1
0cr*	War	Military College	27	90%	analyze+1
100cr	Science	College of Science	28	75%	analyze+1
200cr	Business	Rank F,H,I,K,M, or N	29	95%	sell+1

STARCLUSTER - CHARACTER GENERATION

TABLE 4: SCHOLASTIC SKILL TABLES FOR TECH LEVEL 1-6

1d10	Secondary Skill Tables									
Roll	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
1	IQ+5	IQ+5	IQ+5	IQ+3	IQ+15	strength+1	IQ+10	strength+1	IQ+15	IQ+5
2	IQ+3	IQ+10	IQ+3	coordin+1	IQ+10	strength+2	IQ+15	strength+2	IQ+5	stws+1
3	endur+1	strength+1	masonry+1	coordin+2	IQ+5	strength+3	IQ+5	strength+3	picking+1	drug+1
4	endur+2	strength+2	carpentry+1	music+1	IQ+3	endur+1	coordin+1	coordin+1	coordin+1	drink+1
5	bow+1	strength+3	strength+1	music+2	coordin+1	endur+2	coordin+2	coordin+2	coordin+2	strngth+1
6	tracking+1	endure+1	coordin+1	agility+1	coordin+2	endur+3	shield+1	endur+1	streetwise+1	agility+1
7	snare+1	minerol+1	coordin+2	agility+2	smithing+1	biology+	TK+1	endur+2	sneaking+1	endur+1
8	strength+1	smithing+1	minerol+1	endur+1	masonry+1	biology+2	endur+1	blade+1	agility+1	drink+2
9	strength+2	endur+2	mining+1	gymnast+1	coordin+3	business+1	endur+2	bow+1	agility+2	bus+1
10	agility+3	IQ+15	minerol+2	streetwise+1	IQ+20	riding+1	endur+3	IQ+5	blade+1	melee+1

2d6	College Skill Tables							
Roll	15	16	17	18	19	20	21	22
2	IQ+5	IQ+3	interrog+2	blade+2	IQ+10	herb+2	masonry+2	IQ+10
3	chemistry+1	strength+1	TK+2	engines+2	music+2	psych+2	carpentry+2	picking+2
4	drug+1	smithing+2	stun+2	gymnast+1	history+2	cooking+1	cooking+1	snare+2
5	smithing+1	smithing+1	pyro+1	bow+1	history+1	dowsing+1	drinking+1	gymnastics+1
6	minerol+1	minerol+1	shield+1	melee+1	unarmed+1	writing+1	mechanics+1	coordination+1
7	linguist+1	business+1	shield+1	blade+1	music+1	unarmed+1	melee+1	forgery+1
8	history+1	mining+1	healing+1	tactics+1	psych+1	law+1	chemistry+1	sneaking+1
9	research+1	melee+1	stun+1	strategy+1	writing+1	history+1	sculpting+1	picking+1
10	mech+1	mech+1	interr+1	lead+1	socio+1	research+1	strength+1	snare+1
11	mech+2	mech+2	healing+2	riding+2	herb+2	writing+2	sculpting+2	sneaking+2
12	physics+2	smith+3	shield+2	bow+2	diagnose+2	linguist+2	masonry+3	gymnastics+2

2d6	College Skill Tables						
Roll	23	24	25	26	27	28	29
2	course+2	linguist+2	diagnose+2	law+2	tactics+3	IQ+10	business+3
3	steering+2	law+2	treatment+1	charisma+2	blade+2	IQ+5	business+2
4	weather+1	history+1	surgery+1	drinking+1	riding+1	biology+2	business+1
5	sailing+1	psych+1	coordin+1	strtwse+1	lead+1	biology+1	writing+1
6	rope+1	drink+1	diagnose+1	business+1	drinking+1	chem+1	drinking+1
7	steering+1	alertness+1	treatment+1	law+1	alertness+1	physics+1	stash+1
8	mech+1	linguist+1	endur+1	endur+1	melee+1	minerol+1	psychology+1
9	blade+1	law+1	research+1	research+1	blade+1	mech+1	negotiate+1
10	engines+1	taste+1	herb+1	history+1	strategy+1	chem+2	linguistics+1
11	sailing+2	taste+2	drug+2	research+2	survival+2	physics+2	negotiate+2
12	engines+2	research+2	surgery+2	writing+2	melee+2	research+2	negotiate+

STARCLUSTER - CHARACTER GENERATION

BOOK OF JALAN CHARACTER GENERATION TABLES

1 PER IQ OVER 120 ON ALL WAIVER ROLLS

WAIVER APPLIES TO EITHER COST OR PREREQUISITES, NOT BOTH.

TABLE 1: APPRENTICESHIPS

Cost	Apprenticeship	Prerequisites	Skill Table	%d Waiver	Metaskill
10cr	Apprentice Hunter	endurance 8+	X	80%	focus+1
50cr	Apprentice Smith	strength 10+, endurance 8+	XI	90%	repair+1
50cr	Apprentice Mason	strength 8+, coordination 8+ or Rank 8	XII	75%	build+1
15cr	Apprentice Entertainer	coordination 8+, charisma 10+	XIII	80%	appear+1
100cr	Apprentice Artificer	coordination 8+, IQ 100+	XIV	70%	design+1
30cr	Apprentice Farmer	Rank K or 7, strength 10+	XV	75%	grow+1
150cr	Apprentice Wizard	PSI 3+	XVI	75%	focus+1
				(cost only)	
100cr	Apprentice Warrior	(3 of 4) strength, coordin, agility, endure 8+	XVII	80%	discipline+1
10cr	Apprentice Thief	coordination/agility 8+	XVIII	80%	obtain+1
0cr	No Apprenticeship	None	XIX	N/A	relate+1

TABLE 2: COLLEGES

Cost	School	Prerequisites	Skill Table	%d Waiver	Metaskill
150cr	College of Science	Apprentice Artificer or IQ 120+	11	90%	analyze+1
100cr	Journeyman Smith	App. Smith or strength 11+, coordin 9+	12	80%	build+1
200cr	Wizard's College	PSI 4+ or Apprentice Wizard	13	80%	focus+1
				(cost only)	
0cr*	Military College	Apprentice Warrior or Rank E or J	14	80%	organize+1
100cr	Bard's College	Apprentice Entertainer or charisma 10+	15	75%	create+1
0cr***	Seminary	Any Apprenticeship	16	70%	relate+1
75cr	Journeyman Mason	Apprentice Mason or coordination 10+	17	70%	build+1
0cr**	Journeyman Thief	coordination 10+ or agility 10+ or Rank D	18	75%	obtain+1
0cr*	Naval College	coordination 9+, endurance 9+ or Rank H	19	80%	organize+1
50cr	College of Arts	coordination 9+, charisma 10+	20	80%	create+1
0cr	No College -Work	None	Any	N/A	relate+1

* Become officer for 6 years

** Become thief for 6 years

*** become priest for 6 years

TABLE 3: POST-GRADUATE EDUCATION

Cost	School	Prerequisites	Skill Table	%d Waiver	Metaskill
300cr	Medical School	College of Science	21	80%	repair+1
300cr	Law School	College of Arts	22	80%	organize+1
0cr*	War College	Military College	23	90%	analyze+1
100cr	Science School	College of Science	24	75%	analyze+1
200cr	Business School	Rank F,H,I,K,M, or N	25	95%	sell+1

STARCLUSTER - CHARACTER GENERATION

TABLE 4: SCHOLASTIC SKILL TABLES FOR BOOK OF JALAN

1d10	Secondary Skill Tables									
Roll	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
1	IQ+5	IQ+5	IQ+5	IQ+3	IQ+15	strength+1	IQ+10	strength+1	IQ+15	IQ+5
2	IQ+3	IQ+10	IQ+3	coor+1	IQ+10	strength+2	IQ+15	strength+2	IQ+5	stwise+1
3	endure+1	strength+1	masonry+1	coor+2	IQ+5	strength+3	IQ+5	strength+3	picking+1	drug+1
4	endur+2	strength+2	carpentry+1	music+1	IQ+3	endur+1	coor+1	coor+1	coor+1	drink+1
5	bow+1	strength+3	strength+1	music+2	coor+1	endur+2	coor+2	coor+2	coor+2	strngth+1
6	tracking+1	endur+1	coor+1	agility+1	coor+2	endur+3	shield+1	endur+1	strtwise+1	agility+1
7	snare+1	minerol+1	coor+2	agility+2	smithing+1	bio+1	TK+1	endur+2	sneak+1	endure+1
8	strength+1	smithing+1	minerol+1	endur+1	coor+3	bus+1	endur+1	blade+1	agility+1	drink+2
9	strength+2	endur+2	mining+1	gymnast+1	coor+3	bus+1	endu+2	bow+1	agility+2	bus+1
10	agility+3	IQ+15	minerol+2	strtwise+1	IQ+20	riding+1	endur+3	IQ+5	blade+1	melee+1

2d6	College Skill Tables								
Roll	11	12	13	14	15	16	17	18	19
2	IQ+5	IQ+3	infuse+1	blade+2	IQ+10	herb+2	masonry+2	IQ+10	course+2
3	chem+1	strength+1	durance+1	engines+2	music+2	psych+2	carp+2	picking+2	steering+2
4	drug+1	smithing+2	emotion+1	gymnast+1	history+2	cooking+1	cooking+1	snare+2	weather+1
5	smoothing+smithing+1	enhance+1	bow+1	history+1	dowsing+1	drink+1	gymnast+1	sailing+1	
6	minerol+1	mineral+	shield+1	melee+1	unarmed+1	writing+1	mech+1	coord+1	rope+1
7	linguist+1	business+1	barrier+1	blade+1	music+1	unarmed+1	melee+1	forgery+1	steering+1
8	history+1	mining+1	commun+1	tactics+1	psych+1	law+1	chem+1	sneak+1	mech+1
9	research+1	melee+1	transfer+1	strategy+1	writing+1	history+1	sculpting+1	picking+1	blade+1
10	mech+1	mech+1	interr+1	lead+1	sociol+1	research+1	strength+1	snare+1	engines+1
11	mech+2	mech+2	seeming+1	riding+2	herb+2	writing+2	sculpting+2	sneak+2	sailing+2
12	physics+2	smith+3	sight+1	bow+2	diagnose+2	linguist+2	masonry+3	gymnast+2	engines+2

2d6	College Skill Tables					
Roll	20	21	22	23	24	25
2	linguist+2	diagnose+2	law+2	tactics+3	IQ+10	business+3
3	law+2	treat+1	charisma+2	blade+2	IQ+5	business+2
4	history+1	surgery+1	drink+1	riding+1	biology+2	business+1
5	psych+1	coor+1	strtwise+1	lead+1	biology+1	writing+1
6	drink+1	diagnose+1	bus+1	drink+1	chem+1	drinking+1
7	alert+1	treat+1	law+1	alert+1	physics+1	stash+1
8	linguist+1	endur+1	endur+1	melee+1	minerol+1	psychology+1
9	law+1	research+1	research+1	blade+1	mech+1	negotiate+1
10	taste+1	herb+1	history+1s	trategy+1	chem+2	linguistics+1
11	taste+2	drug+2	research+2	survival+2	physics+2	negotiate+2
12	research+2	surgery+2	writing+2	melee+2	research+2	negotiate+3

STARCLUSTER - CHARACTER GENERATION

TABLE 5A: EMPLOYMENT TABLE FOR TECH LEVEL 8+ CULTURES

NOTE: ANY ROLL OF NAV FOR TECH LEVEL 8 OR 9 SHOULD BE TREATED AS PILOT

Waiver Roll	Employ.	Skill Tables	Metaskill	Prerequisites	Pay Scale
70%	Agent	AO, P	sell+1	negotiation+2, charisma 8+	100J2
80%	Alderman	DE,BE	appear+1	charisma9+, streetwise+2 or Thieve's College	50J2
85%	Anachronist	BF,CF	appear+1	charisma8+, history+1	150J1
80%	Appraiser	AS, FX	analyze+1	evaluate +1	150J1
75%	Archaeologist	AW, AX	extract+1	history+2, sociology+2	50J4
85%	Archivist	CF,CH,AJ	organize+1	history+3	150J1
50%	Army	C, F	discipline+1	STR 10+, END 9+ or Rank J or Mil College	50J1
80%	Artist	AH, H	embellish+1	painting+2 or coordination 9+	50J2
90%	Aster Miner	Y, O	orient 3D+1	pilot+1, or smallcraft+1	60J2
90%	Athlete	K, H	discipline+1	STR 10+, COOR 10+, AGY 10+, END 10+	50J3
90%	Attorney	BJ, CH	protect+1	law+1 or Law School	100J1
70%	Barkeep	DT,DZ	relate+1	brewing+1, psychology+2	30J2
85%	Barrister	BJ,CH	coverse+1	law+2, charisma8+ or Law School	200J1
90%	Biologist	D, I	grow+1	biology+3 or biology+2, chemistry+2	75J1
90%	Body Thief	FU, BP	extract+1	Apprentice Thief, drug+1	150J1
45%	Bouncer	FW, CK	protect+1	STR 8+, melee+1	20J3
75%	BountyHunter	AS, AT,AR	focus+1	beam+2, smallcraft+2	50J3
85%	Boxer	CD,CV	discipline+1	strength 10+, coordin 10+	100J2
60%	Bureaucrat	Q, I	organize+1	charisma 6-, programming+2	40J1
85%	Burglar	BO,CK	obtain+1	COOR 11+, AGY 10+ or Journeyman Thief	50J4
95%	Businessman	J, AZ	sell+1	business+4 or business+2, negotiation+2 or Business School	100J2
75%	Chef	FX, CP	create+1	cooking+3	80J2
80%	Chemist	A, I	analyze+1	chemistry+3, minerology+1	75J1
90%	Chiropractor	FH, DY	repair+1	STR8+, COOR 8+, TREAT+1	100J1
60%	Clerk	CH,CF	organize+1	writing+1	25J2
95%	Comic	DT,CD,DD	coverse+1	IQ 110+, CHAR 8+ or Acting College, IQ 110+	150J1
80%	Comm Tech	FS, AV	repair+1	programming+1	50J1
85%	Composer	CA,DS	create+1	music+3	100J1
75%	Cosmetologist	P, FZ	appear+1	disguise+1	50J3
70%	Courier	AN, U	protect+1	endurance8+, charisma 8+	100J1
85%	Cryptographer	FS, AE, I	analyze+1	cryptography+3 or programming+7	250J1
80%	Customs	AP, V	analyze+1	stash+2	60J1
80%	Cutpurse	B,PCG	obtain+1	coordination 11+ or Journeyman Thief	20J3
95%	Cyberneticist	FL, AE	build+1	cybernetics+1, research+2 or Computer College, cybernetics+1	100J2
90%	Dancer	AM, AR	discipline+1	agility 10+, endurance 9+	60J3
80%	Demolitions	FT, FM	analyze+1	Military College or COOR10+, IQ 100+	95J1
80%	Diplomat	AC, G	coverse+1	negotiation+2	100J2

STARCLUSTER - CHARACTER GENERATION

90%	Doctor	W, Q	repair+1	Medical School	50J3
80%	Drive Tech	N, AD	repair+1	Drives+1 or Engineering College	125J1
85%	Ecologist	A, M	analyze+1	chemistry+2, biology+2, minerology+2	250J1
95%	Engineer	N, I	design+1	Engineer College or Tech School, IQ 110+	60J2
90%	Entertainer	H, I	converse+1	Acting College or charisma 10+	20J3
99%	Explorer	M, F	organize+1	Military College or endur 10+, strength 10+	20J5
80%	Factor	FX, AC	sell+1	business+1 or neg+1 or Business College	75J3
99%	Faith Healer	FI, DE	appear+1	Seminary College	200J1
75%	Farmer	D, K	grow+1	Agri College or Agri School, biology+2	10J5
65%	Fence	DZ, DE	appear+1	business+3, taste+1 or Thieve's College	50J2
85%	Fencer	BF, DV, DS	focus+1	blade+4	100J2
65%	Fortune Teller	FY, P	appear+1	Thieve's College or PSI 1+	20J5
80%	Gamesman	I, AY	analyze+1	IQ 120+	30J2
85%	Genetic Tech	FN, FU	build+1	genetics+1 or Medical School	100J1
95%	Genetic Design	FN, AG, FU	design+1	Medical School, genetics+3	150J3
70%	Goon	F, CO	appear+1	gun+2, strength 8+ or Military College	60J1
80%	Grad Student	S, L	organize+1	any College	0J1
65%	Gunner	FP, F	focus+1	Military College or Ship's Guns+1	75J1
85%	Headmaster	CO, FX	discipline+1	any skill +5	100J1
95%	Historian	AJ, AQ	extract+1	history+2 or research+3	50J2
85%	Outman	R, F	focus+1	STR 10+, COOR 10+, or Thieve's College	15J3
80%	Infiltrator	DL, DZ	appear+1	disguise+1, sneaking+1, picking+1	150J1
90%	Intruder	FR, FM, DL	appear+1	Military College or Apprentice Thief	125J1
95%	Jeweler	DR, BE	embellish+1	coordination 10+, taste+2	250J1
80%	Jingle Writer	CA, DZ	create+1	music+2, writing+2 or Music College	100J1
95%	Judge	BJ, CH, CF	analyze+1	law+3, neg+2, or Law School, neg+2	250J1
90%	Juggler	DD, DZ	appear+1	COOR 11+, AGY 10+ or Acting College	30J2
80%	Lawman	F, V	protect+1	endur 8+, gun+2 or Thieve's College, gun+2	75J1
90%	Lawyer	H, V	organize+1	Law School	50J3
90%	Lecturer	CF, CO	converse+1	charisma 8+, writing+1	150J1
95%	Linguist	AE, U	analyze+1	linguistics+2	150J1
N/A	Magician	AU, AV, DE	converse+1	PSI2+, charisma 9+	50J3
80%	Mancatcher	DQ, DZ	focus+1	law+1, melee+1	100J1
70%	Marines	B, C, F	orient 3D+1	STR 9+, AGY 9+, END 9+, COOR 9+, or Rank J or Military College	50J1
99%	Martial Artist	FJ, CV	discipline+1	unarmed+5	100J1
80%	Matchmaker	P, FX	relate+1	negotiate+2 or business+1, negotiate+1	50J3
98%	MatTran Tech	FO, FU	repair+1	Mil College, PSI+2 or PSI+3 (TL 10 only)	100J2
90%	Mechanic	GK, GU	repair+1	mechanics+3 or Tech School	40J4
85%	Medic	FU, FV	repair+1	Medical School or Military College	100J1
85%	Medical Tech	FU, FM	repair+1	drug+3 or Medical School, drug+1	100J2
55%	Merc	F, CJ	discipline+1	gun+2 or beam+2 or Military College	50J1
80%	Merchant	J, F	sell+1	charisma 6+, endur 8+, or Thieves College	20J3
85%	Moneylender	CO, BE	grow+1	business+3 or Business School	100J3
80%	Mountebank	DE, DQ	appear+1	COOR 10+, sleight+2 or Thieve's College	50J2
90%	Musician	AI, E	embellish+1	music+2 or endurance 9+	150J1

STARCLUSTER - CHARACTER GENERATION

75%	Navy	B,F	discipline+1	COOR10+, AGY 9+, or Rank J or Mil College	75J1
90%	Notary	BJ, P	organize+1	law+1, writing+1 or Law School	125J1
85%	Perfumier	AQ, BD, GV	create+1	chemistry+1, taste+1 or chemistry+3	125J2
90%	Pharmacist	FU, BD	build+1	drug+2 or drug+1, chemistry+1	100J1
80%	Physician's Assistant	DY,CG	organize+1	psychology+1, surgery+1	50J2
99%	Physicist	AD, N	analyze+1	physics+2	250J1
50%	Pilgrim	DL,DZ,BE	focus+1	endurance 6+ or Seminary College	5J1
80%	Pirate	AA, O	obtain+1	smallcraft+1	50J3
80%	Playwright	DS,CF	create+1	writing+3, psychology+2	175J2
80%	Poet	CH,DZ	create+1	writing+2	30J3
75%	Police	BJ, FW	protect+1	law+1, gun+1	75J1
90%	Politician	H, Q	appear+1	CHAR 8+ & Acting College, or CHAR 10+ & Thieves College	50J2
80%	Priest	P, H	relate+1	Seminary College	30J1
80%	Primitivist	AK, G	observe+1	endurance 10+	30J1
70%	Programmer	I, Q	organize+1	Computer College or programming+8	30J2
75%	Prospector	DW, BH	analyze+1	minerology+1, mining+1	30J4
none	Psiman	T, I	focus+1	Psi College or Psi 3+	50J2
90%	Racer	AF, Z	orient 3D+1	driving+2	100J2
80%	Ranger	D, V	protect+1	strength 10+, endurance 10+, biology+2	60J1
80%	Reporter	E, Z	extract+1	charisma 10+, endurance 8+, IQ 110+	50J2
80%	Researcher	AL, S	extract+1	research+2 or endurance 9+	50J1
85%	Robot Repairman	FL, AV	repair+1	electronics+2, mechanics+2	100J1
95%	Robot Designer	FL, AV, AE	design+1	Computer College, cybernetics+3	200J2
60%	Runner	CW,DZ	discipline+1	agility 10+, endurance 10+	50J1
85%	Sage	CH,CF,DS	analyze+1	sight+1, history+2	50J3
70%	Salesman	J, P	sell+1	business+1 or neg+1 or Business School	50J3
85%	Scrivner	DS,CO	embellish+1	writing+2, psychology+1	100J1
70%	Secretary	J, AQ	organize+1	psychology+1	50J2
60%	Security Guard	FW, CK	protect+1	Any College	45J1
75%	Servant	K, Z	relate+1	Rank A-, coordination 8+	20J1
65%	Singer	CA,BE	embellish+1	music+1	50J3
80%	Smuggler	AB, H	coverse+1	pilot+2	50J4
75%	Social Worker	L, Q	relate+1	Charisma 8+, sociology+2 or any college	30J1
95%	Spacecraft Designer	N, AD, GK	design+1	physics+3, bio+2 or physics+2, bio+3	150J3
80%	Spaceman	O, F	orient 3D+1	Mil College or Psi College or agility 10+	30J1
99%	Special Forces	FQ, FR, F	focus+1	Military College, END10+	150J1
99%	Spy	G, C, F	appear+1	Acting College or agility 10+, COOR 10+	100J1
65%	Storekeep	BE,CO	sell+1	business+1 or Business School	50J2
50%	Street Rat	CG,DZ	relate+1	rank 4-	10J1

STARCLUSTER - CHARACTER GENERATION

40%	Student	any	organize+1	Age 26-, any College	0J1
99%	Surgeon	X, W	repair+1	coordination 10+, Medical School	50J4
N/A	Teacher	any	relate+1	any skill +5	60J1
80%	Technician	I, L	repair+1	Tech School or mechs+2 or programming+2	60J1
70%	Thespian	DZ,CO	appear+1	CHAR 10+, END 8+ or Acting College	50J2
80%	Thief	E, F	obtain+1	Thieve's College or Rank A- or Journeyman Thief	30J3
50%	Thug	DC,BF	appear+1	strength 8+, melee+2	30J2
65%	Trader	BE,CG	sell+1	business+1 or Business School	100J1
75%	Transport Tech	FM, AV	repair+1	Engineering College or driving+2, mech+2	75J1
85%	Transport Designer	AF, FM	design+1	Engineering College, driving+1	85J2
60%	Transporter	Z, K	organize+1	coordination 8+, driving+1	30J1
N/A	Unemployed	U, F	relate+1	None	0J1
70%	Weapons Tech	AD, FP	repair+1	Military College or Ship's Guns+2	100J1
N/A	Wizard	T, AK	focus+1	PSI2+, history+2	50J3
35%	Worker	K, U	build+1	Rank 8+	20J1
85%	Wrestler	CC,CV	discipline+1	strength 10+, agility10+	100J2
80%	Writer	AG, U	create+1	writing+1	50J3



STARCLUSTER - CHARACTER GENERATION

TABLE 5B: EMPLOYMENT TABLE FOR TECH LEVEL 5-7 (BACKWARD) CULTURES

NOTE: TREAT ANY MENTION OF BEAM AS GUN, ANY ROLL OF NAV AS COURSE, AND ANY MENTION OF ENGINES AS GUNNERY

IN TL 5 OR 6 TREAT ANY MENTION OF GYROJET AS GUN, AND ANY ROLL OF PILOT AS COURSE

PLAYER S OPTION: TREAT ANY MENTION OF SAIL AS STEER AND ANY ROLL OF BOW AS GUN IF PREFERRED

PLAYER S OPTION: TREAT ANY MENTION OF DRIVING AS RIDING, OR VICE VERSA, IF PREFERRED

PLAYER S OPTION: TREAT ANY MENTION OF DRUG AS HERBALISM, OR VICE VERSA, IF PREFERRED

Waiver Roll	Employ.	Skill Tables	Metaskill	Prerequisites	Pay Scale
70%	Agent	AO, P	sell+1	negotiation+2, charisma 8+	100J2
65%	Agricolist	BR,BD	grow+1	bio+1, husbandry+1 or College of Sciences	75J1
90%	Airman	FE, N	orient 3D+1	Military College or COOR 10+	75J1
80%	Alderman	DE,BE	appear+1	charisma9+, streetwise+2 or Thieve's College	50J2
85%	Anachronist	BF,CF	appear+1	charisma8+, history+1	150J1
80%	Appraiser	AS, FX	analyze+1	evaluate +1	150J1
75%	Archaeologist	AW, AX	extract+1	history+2, sociology+2	50J4
85%	Archer/ Sharpshooter	BF,BN	focus+1	bow+4 (or gun+4)	150J1
85%	Archivist	CF,CH,AJ	organize+1	history+3	150J1
90%	Armored	F, FD, Z	protect+1	Mil College, STR 8+ or STR 10+, COOR 10+	100J1
75%	Arms Runner	BS,F,BB	sell+1	sailing+2	50J3
50%	Army	C, F	discipline+1	STR10+, END 9+, or Rank J or Mil College	50J1
90%	Artificer	CE,CF	build+1	mechanics+3 or College of Science	175J1
80%	Artist	AH, H	embellish+1	painting+2 or coordination 9+	50J2
75%	Assassin	DM,BF	focus+1	disguise+2, blade+1, herbology+1 or Thieve's College	50J3
99%	Astronaut (TL7 only)	FC, M	orient 3D+1	Mil College, END 8+, IQ 120+	200J1
90%	Athlete	K, H	discipline+1	STR 10+, COOR 10+, AGY 10+, END 10+	50J3
90%	Attorney	BJ, CH	protect+1	law+1 or Law School	100J1
70%	Barkeep	DT,DZ	relate+1	brewing+1, psychology+2	30J2
85%	Barrister	BJ,CH	converse+1	law+2, charisma8+ or Law School	200J1
90%	Biologist	D, I	grow+1	biology+3 or biology+2, chemistry+2	75J1
45%	Bouncer	FW, CK	protect+1	STR 8+, melee+1	20J3
85%	Brewer	DU,DZ	build+1	brewing+2	50J2
60%	Bureacrat	Q, I	organize+1	charisma 6-, programming+2	40J1
85%	Burgler	BO,CK	obtain+1	COOR 11+, AGY 10+ or Thieve's College	50J4
95%	Businessman	J, AZ	sell+1	business+4 or business+2, negotiation+2 or Business School	100J2
80%	Carpenter	DG,DF	build+1	carpentry+2	75J1
85%	Carver	DG,CG	embellish+1	forestry+1, sculpting+1	100J1

STARCLUSTER - CHARACTER GENERATION

90%	Cavalry	BC, BF, BG	observe+1	strength 10+, Rank G+	100J1
75%	Chasseur	DO,DK	extract+1	riding+2, melee+2, bow+2	150J1
75%	Chef	FX, CP	create+1	cooking+3	80J2
80%	Chemist	A, I	analyze+1	chemistry+3, minerology+1	75J1
90%	Chiropractor	FH, DY	repair+1	STR8+, COOR 8+, TREAT+1	100J1
60%	Clerk	CH,CF	organize+1	writing+1	25J2
95%	Comic	DT,CD,DD	converse+1	IQ 110+, CHAR8+	
				or Acting College, IQ 110+	150J1
80%	Comm Tech	FS, AV	repair+1	programming+1	50J1
85%	Composer	CA,DS	create+1	music+3	
				or Music College, music +1, writing+1	100J1
80%	Condotieri	CI,BF,BC	organize+1	strength+1, engines+2 or Military College	50J3
65%	Cook	CP,DZ	build+1	cooking+1	30J1
75%	Cosmetologist	P, FZ	embellish+1	disguise+1	50J3
70%	Courier	AN, U	protect+1	endurance8+, charisma 8+	100J1
90%	Crooner	FG, AR	appear+1	music+3, CHAR 10+	150J2
85%	Cryptographer	FS, AE, I	repair+1	cryptography+3 or programming+7	250J1
80%	Customs	AP, V	analyze+1	stash+2	60J1
80%	Cutpurse	BP,CG	obtain+1	coordination 11+ or Thieve's College	20J3
90%	Dancer	AM, AR	discipline+1	agility 10+, endurance 9+	60J3
80%	Demolitions	FT, FM	analyze+1	Military College or COOR10+, IQ 100+	95J1
80%	Diplomat	AC, G	converse+1	negotiation+2	100J2
85%	Diver	FF, FK	orient 3D+1	swim+1, END 8+	50J1
90%	Doctor	W, Q	repair+1	Medical School	50J3
80%	Drive Tech	N, AD	repair+1	Drives+1 or Engineering College	125J1
50%	Drover	CL,DK	organize+1	strength 8+, endurance 8+	20J1
85%	Ecologist	A, M	analyze+1	chemistry+2, biology+2, minerology+2	250J1
95%	Engineer	N, I	design+1	Engineering College	
				or Tech School, IQ 110+	60J2
90%	Entertainer	H, I	converse+1	Acting College or charisma 10+	20J3
99%	Explorer	M, F	organize+1	Military College or END 10+, STR 10+	20J5
80%	Factor	FX, AC	sell+1	business+1 or neg+1 or Business College	75J3
99%	Faith Healer	FI, DE	appear+1	Seminary College	200J1
75%	Farmer	D, K	grow+1	Agri College or Agri School, biology+2	10J5
65%	Fence	DZ,DE	appear+1	business+3, taste+1 or Thieve's College	50J2
85%	Fencer	BF,DV,DS	focus+1	blade+4	100J2
55%	Fisherman	CS,CC	extract+1	weather+1, sailing+1, endurance 6+	30J1
60%	Forester	CT,BH	extract+1	forestry+1, melee+1	50J1
65%	Fortune Teller	FY, P	appear+1	Thieve's College or PSI 1+	20J5
80%	Gamesman	I, AY	analyze+1	IQ 120+	30J2
70%	Goon	F,CO	appear+1	gun+2, strength 8+ or Military College	60J1
80%	Grad Student	S, L	organize+1	any College	0J1
60%	Groom	DK,BR	grow+1	husbandry+1, riding+1	30J3
60%	Guard	BF,DK	protect+1	blade+1, endurance8+ or Military College	30J1
85%	Guide	BH,CT	observe+1	tracking+1, survival+1	50J1
65%	Gunner	FP, F	focus+1	Military College or Ship's Guns+1	75J1

STARCLUSTER - CHARACTER GENERATION

80%	Handler	DN,BR	discipline+1	training+2, husbandry+2	30J3
55%	Harvestman	BR,CL	extract+1	endurance 8+, husbandry+1	15J2
85%	Headmaster	CO, FX	discipline+1	any skill +5	100J1
80%	Herbalist	BR,BD	extract+1	herbology+3, bio+2 or College of Sciences	150J1
50%	Herdsmen	CI,CT	grow+1	agility 7+, rank 8-	5J1
95%	Historian	AJ, AQ	extract+1	history+2 or research+3	50J2
85%	Hitman	R, F	focus+1	STR 10+, COOR 10+, or Thieve's College	15J3
70%	Hunter	BH,BN	extract+1	bow+2	15J1
50%	Infantry	BC, F	discipline+1	STR 10+, END 9+ or Rank J or Military College	50J1
80%	Infiltrator	DL,DZ	appear+1	disguise+1, sneaking+1, picking+1	150J1
95%	Jeweler	DR,BE	embellish+1	coordination 10+, taste+2	250J1
80%	Jingle Writer	CA,DZ	create+1	music+2, writing+2 or Music College	100J1
95%	Judge	BJ,CH,CF	analyze+1	law+3, neg+2, or Law School, neg+2	250J1
90%	Juggler	DD,DZ	appear+1	COOR 11+, AGY 10+ or Acting College	30J2
80%	Lawman	F, V	protect+1	END 8+, gun+2 or Thieve's College, gun+2	75J1
90%	Lawyer	H, V	organize+1	Law School	50J3
90%	Lecturer	CF,CO	converse+1	charisma 8+, writing+1	150J1
80%	Limner	BI, CG	embellish+1	coordination 10+ or painting+1	20J1
95%	Linguist	AE, U	analyze+1	linguistics+2	150J1
N/A	Magician	AU,AV, DE	converse+1	PSI2+, charisma 9+	50J3
80%	Mancatcher	DQ,DZ	focus+1	law+1, melee+1	100J1
70%	Marines	B, C, F	discipline+1	STR9+, AGY 9+, END 9+, COOR 9+, or Rank J or Military College	50J1
99%	Martial Artist	FJ, CV	focus+1	unarmed+5	100J1
80%	Mason	BU,CG	build+1	masonry+2 or Journeyman Mason	30J3
80%	Matchmaker	P, FX	relate+1	negotiate+2 or business+1, negotiate+1	50J3
90%	Mechanic	GK, GU	repair+1	mechanics+3 or Tech School	40J4
85%	Medic	FU, FV	repair+1	Medical School or Military College	100J1
85%	Medical Tech	FU, FM	repair+1	drug+3 or Medical School, drug+1	100J2
55%	Merc	F,CJ	discipline+1	gun+2 or beam+2 or Military College	50J1
80%	Merchant	J, F	sell+1	charisma 6+, endur 8+, or Thieves College	20J3
70%	Messenger	CW,DK	protect+1	charisma 8+, riding+2	75J1
75%	Miner	DW,DZ	extract+1	mining+1	30J1
85%	Moneylender	CO,BE	grow+1	business+3	100J3
80%	Montebank	DE,DQ	appear+1	COOR 10+, sleight+2 or Thieve's College	50J2
90%	Musician	AI, E	embellish+1	music+2 or endurance 9+	150J1
80%	Naval Elite	BT,F,BB	focus+1	engines+1, sailing+1, course+1 or Naval College	50J3
75%	Navy	B,F	discipline+1	COOR10+, AGY 9+, or Rank J or Mil College	75J1
90%	Notary	BJ, P	organize+1	law+1, writing+1 or Law School	125J1
80%	Nurse	DY,DZ	organize+1	treatment+1	30J1
85%	Organlegger	FV, FX	extract+1	surgery+1 or Medical School (TL 7 only)	100J3
50%	Peasant	BR,CG	grow+1	endurance7+	10J1
85%	Perfumier	AQ, BD, GV	create+1	chemistry+1, taste+1 or chemistry+3	125J2

STARCLUSTER - CHARACTER GENERATION

90%	Pharmacist	FU, BD	build+1	drug+2 or drug+1, chemistry+1	100J1
80%	Physician's Assistant	DY,CG	organize+1	psychology+1, surgery+1	50J2
99%	Physicist	AD, N	analyze+1	physics+2	250J1
50%	Pilgrim	DL,DZ,BE	focus+1	endurance 6+	5J1
80%	Playwright	DS,CF	create+1	writing+3, psychology+2	175J2
65%	Poacher	BN,CG	obtain+1	snare+2	15J1
80%	Poet	CH,DZ	create+1	writing+2	30J3
75%	Police	BJ, FW	protect+1	law+1, gun+1	75J1
90%	Politician	H, Q	appear+1	CHAR 8+ & Acting College, or CHAR 10+ & Thieves College	50J2
85%	Portraitist	BI,CK	observe+1	painting+3 or Art School, painting +1	50J3
80%	Priest	P, H	relate+1	Seminary	30J1
80%	Primitivist	AK, G	extract+1	endurance 10+	30J1
70%	Programmer	I, Q	organize+1	Computer College or programming+8	30J2
75%	Prospector	DW,BH	analyze+1	minerology+1, mining+1	30J4
none	Psiman	T, I	focus+1	Psi College or Psi 3+	50J2
85%	Pugilist	CD,CV	discipline+1	strength 10+, coordination 10+	100J2
90%	Racer	AF, Z	focus+1	driving+2	100J2
80%	Ranger	D, V	protect+1	strength 10+, endurance 10+, biology+2	60J1
80%	Reporter	E, Z	extract+1	charisma 10+, endurance 8+, IQ 110+	50J2
80%	Researcher	AL, S	extract+1	research+2 or endurance 9+	50J1
60%	Runner	CW,DZ	discipline+1	agility 10+, endurance 10+	50J1
85%	Sage	CH,CF,DS	analyze+1	sight+1, history+2	50J3
65%	Sailor	BB,BF	organize+1	COOR10+, AGY9+ or Rank J or Naval College	75J1
70%	Salesman	J, P	sell+1	business+1 or neg+1 or Business School	50J3
80%	Scout	DK,DV	observe+1	survival+1, riding+1, sneaking+1 or Thief's College	50J2
85%	Scrivner	DS,CO	embellish+1	writing+2, psychology+1	100J1
70%	Secretary	J, AQ	organize+1	psychology+1	50J2
60%	Security Guard	FW, CK	protect+1	Any College	45J1
75%	Servant	K, Z	relate+1	Rank A-, coordination 8+	20J1
65%	Singer	CA,BE	embellish+1	music+1	50J3
50%	Slaver	BF,CG	appear+1	melee+1, strength 8+	50J1
90%	Smith	BL,CE	build+1	smithing+2 or Journeyman Smith	50J3
75%	Social Worker	L, Q	relate+1	Charisma 8+, sociology+2 or any college	30J1
99%	Special Forces	FQ, FR, F	focus+1	Military College, END10+	150J1
99%	Spy	G, C, F	appear+1	Acting College or agility 10+, COOR 10+	100J1
65%	Squire	DK,BF	organize+1	riding+1, husbandry+1, smithing+1	50J2
85%	Stonecarver	BV,CG	embellish+1	masonry+1, sculpting+1	60J2
65%	Storekeep	BE,CO	sell+1	business+1 or Business School	50J2
50%	Street Rat	CG,DZ	relate+1	rank 4-	10J1
40 %	Student	any	organize+1	Age 26-, any College	0J1

STARCLUSTER - CHARACTER GENERATION

99%	Surgeon	X, W	repair+1	coordination 10+, Medical School	50J4
65%	Tanner	BQ, BM	build+1	tanning+2	20J1
N/A	Teacher	any	relate+1	any skill +5	60J1
80%	Technician	I, L	repair+1	Tech School or mech+2 or programming+2	60J1
70%	Thespian	DZ,CO	appear+1	charisma 10+, END 8+ or Acting College	50J2
80%	Thief	E, F	obtain+1	Thieve's College or Rank A-	30J3
50%	Thug	DC,BF	appear+1	strength 8+, melee+2	30J2
75%	Tinker	DX,DZ	repair+1	mechanics+1	30J1
85%	Toymaker	DT,BV	build+1	IQ 100+, psychology+1, carpentry+1	100J1
65%	Trader	BE,CG	sell+1	business+1 or Business School	100J1
75%	Transport Tech	FM, AV	repair+1	Engineering College or driving+2, mech+2	75J1
85%	Transport Designer	AF, FM	design+1	Engineering College, driving+1	85J2
60%	Transporter	Z, K	organize+1	coordination 8+, driving+1	30J1
70%	Trapper	DO,BH	extract+1	snare+2, melee+1	30J3
N/A	Unemployed	U, F	relate+1	None	0J1
70%	Valet	CP,BR	organize+1	coordination 6+, psychology+2	50J1
85%	Vintner	DU,BD	build+1	brewing+1, biology+2	50J2
90%	Voyager	BB,CH,DO	observe+1	astronomy+1, course+1, writing+1	50J4
50%	Waterman	CS,DZ	organize+1	steering+1, swimming+1	30J2
70%	Weapons Tech	AD, FP	repair+1	Military College or Ship's Guns+2	100J1
65%	Weaver	BK, DZ	build+1	weaving+1 or coordination 9+	50J3
N/A	Wizard	T, AK	focus+1	PSI2+, history+2	50J3
65%	Woodsman	CT,BD	analyze+1	forestry+2, bio+2 or College of Sciences	30J3
35%	Worker	K, U	build+1	Rank 8+	20J1
85%	Wrestler	CC,CV	discipline+1	strength 10+, agility10+	100J2
80%	Writer	AG, U	create+1	writing+1	50J3
70%	Yeoman	BR,BN	grow+1	husbandry+2, training+1	50J1

STARCLUSTER - CHARACTER GENERATION

TABLE5C: EMPLOYMENT TABLE FOR TECH LEVEL 1-4 (PRIMITIVE) CULTURES

Waiver Roll	Employ.	Skill Tables	Metaskill	Prerequisites	Pay Scale
65%	Agricolist	BR,BD	grow+1	bio+1, husbandry+1 or College of Sciences	75J1
80%	Alderman	DE,BE	appear+1	CHAR9+, streetwise+2 or Journeyman Thief	50J2
85%	Archer	BF,BN	focus+1	bow+4	150J1
85%	Archivist	CF,CH,BZ	organize+1	history+3	150J1
90%	Artificer	CE,CF	build+1	mechanics+3 or College of Science1	75J1
75%	Assassin	DM,BF	focus+1	disguise+2, blade+1, herbology+1 or Journeyman Thie	50J3
90%	Attorney	BJ, CH	protect+1	law+1 or Law School	100J1
80%	Barber	DY,CG	embellish+1	psychology+1, surgury+1	50J2
70%	Barkeep	DT,DZ	relate+1	brewing+1, psychology+2	30J2
85%	Barrister	BJ,CH	converse+1	law+2, charisma8+ or Law School	200J1
85%	Brewer	DU,DZ	build+1	brewing+2	50J2
75%	Buccaneer	BS,BF,BB	obtain+1	sailing+2	50J3
85%	Burgler	BO,CK	obtain+1	COOR 11+, AGY10+ or Journeyman Thief	50J4
80%	Carpenter	DG,DF	build+1	carpentry+2	75J1
75%	Cartwright	DX,CO	build+1	carpentry+1, smithing+1	30J2
85%	Carver	DG,CG	embellish+1	forestry+1, sculpting+1	100J1
90%	Cavalier	DP,BF	focus+1	riding+3, blade+2, Rank G+	200J1
75%	Chaseur	DO,DK	extract+1	riding+2, melee+2, bow+2	150J1
75%	Chef	FX, CP	create+1	cooking+3	80J2
60%	Clerk	CH,CF	organize+1	writing+1	25J2
70%	Cobbler	BQ,CG	build+1	endurance 8+, coordination 7+	15J1
85%	Composer	CA,DS	create+1	music+3	100J1
80%	Condotieri	CI,BF,BC	organize+1	strength+1, engines+2 or Mil itary College	50J3
65%	Cook	CP,DZ	build+1	cooking+1	30J1
80%	Cutpurse	BP,CG	obtain+1	coordination 11+ or Journeyman Thief	20J3
50%	Drover	CL,DK	organize+1	strength 8+, endurance 8+	20J1
85%	Falconer	DN,DK	discipline+1	husbandry+3, training+1	50J2
65%	Fence	DZ,DE	appear+1	business+3, taste+1 or Journeyman Thief	50J2
85%	Fencer	BF,DV,DS	focus+1	blade+4	100J2
55%	Fisherman	CS,CC	extract+1	weather+1, sailing+1, endurance 6+	30J1
95%	Fool	DT,CD,DD	converse+1	IQ 110+, CHAR8+ or Acting College, IQ 110+	150J1
60%	Forester	CT,BH	extract+1	forestry+1, melee+1	50J1
65%	Fortune Teller	FY, P	appear+1	Thieve's College or PSI 1+	20J5
60%	Groom	DK,BR	grow+1	husbandry+1, riding+1	30J3
60%	Guard	BF,DK	protect+1	blade+1, endurance8+ or Military College	30J1
85%	Guide	BH,CT	observe+1	tracking+1, survival+1	50J1
80%	Handler	DN,BR	discipline+1	training+2, husbandry+2	30J3
55%	Harvestman	BR,CL	extract+1	endurance 8+, husbandry+1	15J2
85%	Headmaster	CO, FX	discipline+1	any skill +5	100J1

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85%	Herald	BF,CF	converse+1	charisma8+, history+1	150J1
80%	Herbalist	BR,BD	extract+1	herb+3, biology+2 or College of Sciences	150J1
50%	Herdsman	CI,CT	grow+1	agility 7+, rank 8-	5J1
70%	Highwayman	CB,DZ,BF	obtain+1	blade+2, riding+1	100J1
70%	Hunter	BH,BN	extract+1	bow+2	15J1
80%	Infiltrator	DL,DZ	appear+1	disguise+1, sneaking+1, picking+1	150J1
95%	Jeweler	DR,BE	embellish+1	coordination 10+, taste+2	250J1
80%	Jongleur	CA,DZ	embellish+1	music+2, writing+2 or Bard's College	100J1
95%	Judge	BJ,CH,CF	analyze+1	law+3, neg+2, or Law School, neg+2	250J1
90%	Juggler	DD,DZ	appear+1	COOR 11+, agility 10+ or Acting College	30J2
90%	Knight	BC, BF, BG	appear+1	strength 10+, Rank G+	100J1
90%	Lecturer	CF,CO	converse+1	charisma 8+, writing+1	150J1
80%	Leech	DY,DZ	repair+1	treatment+1	30J1
80%	Limner	BI, CG	embellish+1	coordination 10+ or painting+1	20J1
N/A	Magician	AU,AV,DE	converse+1	PSI 2+, CHAR 9+	50J3
80%	Mancatcher	DQ,DZ	focus+1	law+1, melee+1	100J1
80%	Mason	BU,CG	build+1	masonry+2 or Journeyman Mason	30J3
80%	Matchmaker	P, FX	relate+1	negotiate+2 or business+1, negotiate+1	50J3
55%	Mercenary	BF,CJ	obtain+1	blade+2	50J1
70%	Messenger	CW,DK	protect+1	charisma 8+, riding+2	75J1
75%	Miner	DW,DZ	extract+1	mining+1	30J1
85%	Moneylender	CO,BE	grow+1	business+3	100J3
80%	Montebank	DE,DQ	appear+1	COOR 10+, sleight+2 or Journeyman Thief	50J2
50%	Peasant	BR,CG	grow+1	endurance7+	10J1
85%	Perfumier	AQ, BD, GV	create+1	chemistry+1, taste+1 or chemistry+3	125J2
90%	Pharmacist	FU, BD	build+1	drug+2 or drug+1, chemistry+1	100J1
50%	Pilgrim	DL,DZ,BE	focus+1	endurance 6+	5J1
80%	Playwright	DS,CF	create+1	writing+3, psychology+2	175J2
65%	Poacher	BN,CG	obtain+1	snare+2	15J1
80%	Poet	CH,DZ	create+1	writing+2	30J3
85%	Portraitist	BI,CK	observe+1	painting+3	50J3
80%	Privateer	BT,BF,BB	extract+1	engines+1, sailing+1, course+1 or Naval College	50J3
75%	Prospector	DW,BH	analyze+1	minerology+1, mining+1	30J4
85%	Pugilist	CD,CV	discipline+1	strength 10+, coordination 10+	100J2
60%	Runner	CW,DZ	discipline+1	agility 10+, endurance 10+	50J1
65%	Sailor	BB,BF	organize+1	COOR10+, AGY9+ or Rank J or Naval College	75J1
80%	Scout	DK,DV	observe+1	survival+1, riding+1, sneaking+1 or Journeyman Thief	50J2
85%	Scrivner	DS,CO	embellish+1	writing+2, psychology+1	100J1
90%	Shipwright	DG,BB, FB	build+1	shipbuilding+1, forestry+1 or Naval College	200J1
65%	Singer	CA,BE	embellish+1	music+1	50J3
50%	Slave	CP,DE	appear+1	strength 5+	5J1
50%	Slaver	BF,CG	appear+1	melee+1, strength 8+	50J1
90%	Smith	BL,CE	build+1	smithing+2 or Journeyman Smith	50J3

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50%	Soldier	BC, BF	discipline+1	STR 10+, END 9+ or Rank J or Military College	50J1
65%	Squire	DK, BF	organize+1	riding+1, husbandry+1, smithing+1	50J2
85%	Stonecarver	BV, CG	embellish+1	masonry+1, sculpting+1	60J2
65%	Storekeep	BE, CO	sell+1	business+1 or Business School	50J2
50%	Street Rat	CG, DZ	relate+1	rank 4-	10J1
65%	Tanner	BQ, BM	build+1	tanning+2	20J1
N/A	Teacher	any	relate+1	any skill +5	60J1
70%	Thespian	DZ, CO	appear+1	CHAR 10+, endurance 8+ or Acting College	50J2
50%	Thug	DC, BF	appear+1	strength 8+, melee+2	30J2
75%	Tinker	DX, DZ	repair+1	mechanics+1	30J1
85%	Toymaker	DT, BV	build+1	IQ 100+, psychology+1, carpentry+1	100J1
65%	Trader	BE, CG	sell+1	business+1 or Business School	100J1
70%	Trapper	DO, BH	extract+1	snare+2, melee+1	30J3
70%	Valet	CP, BR	organize+1	coordination 6+, psychology+2	50J1
85%	Vintner	DU, BD	build+1	brewing+1, biology+2	50J2
90%	Voyager	BB, CH, DO	observe+1	astronomy+1, course+1, writing+1	50J4
70%	Warrior	BF, CO	focus+1	blade+2, strength 8+ or Military College	60J1
50%	Waterman	CS, DZ	organize+1	steering+1, swimming+1	30J2
65%	Weaver	BK, DZ	build+1	weaving+1 or coordination 9+	50J3
N/A	Wizard	T, AK	focus+1	PSI 2+, history+2	50J3
65%	Woodsman	CT, BD	analyze+1	forestry+2, biology+2 or College of Science	30J3
85%	Wrestler	CC, CV	discipline+1	strength 10+, agility 10+	100J2
70%	Yeoman	BR, BN	grow+1	husbandry+2, training+1	50J1

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TABLE 5D: BOOK OF JALAN MAGIC EMPLOYMENT TABLE
FOR NON-MAGIC PROFESSIONS, USE THE TECH LEVEL 1-4 TABLE (TABLE 5C)

Waiver Roll	Employ.	Skill Tables	Prerequisites	Pay Scale	Metaskill
85%	Acolyte	CO,CZ	sleight+1, alertness+1, PSI 1+ or Seminary	50J1	repair+1
90%	Alchemist	BA,DF,BW	chem+2, infusion+1 or College of Science	75J2	analyze+1
90%	Anchorite	EL, CP, CQ	herbology+2, PSI 1+ or Seminary	30J1	observe+1
90%	Bard	BZ,BY,BH	music+2, history+2 or Bard's College	150J2	create+1
60%	Beadle	EW, CP	cooking+2, PSI 1+ or Seminary	30J2	repair+1
80%	Cantor	EM, BZ	Seminary, music+1 or music+3, PSI 2+	50J2	embellish+1
85%	Celebrant	EI, EJ	charisma 10+, connect+1 or Seminary, PSI 2+	100J1	relate+1
85%	Champion	BF,CU,BG	blade+2, riding+3, PSI 2+	250J1	protect+1
85%	Cleric	DA,DT	law+1, sociology+2, PSI 2+ or Seminary	60J2	organize+1
65%	Deacon	EP, DS	business+2, law+1 or Seminary, business+1	70J2	grow+1
90%	Druid	CQ,DH,BD	forestry+1, biology+1, PSI 2+ or Seminary, forestry+1	100J1	protect+1
80%	Envoy	ED, DL, CB	disguise+1, PSI 2+ or Wizard's College	80J2	converse+1
95%	Exorcist	EK, DB	command+3 or Seminary, command+1	80J1	extract+1
85%	Friar	DB,DK	streetwise+1, neg+1, PSI 1+ or Seminary	60J1	embellish+1
85%	Godsmith	EO, BL, DC	Journeyman Smith, PSI 2+ or Seminary, smithing+1	100J2	build+1
80%	Healer	CM,DY	herbology+2, augment+2 or Seminary	100J1	repair+1
80%	Hedge Priest	CQ,BN	survival+1, END 8+, PSI 1+ or Seminary	30J2	obtain+1
85%	Hedge Wizard	CN,DZ	telekinesis+2, transfer+1 or Wizard's College	30J3	obtain+1
80%	Herbalist	BR,BD	herbology+3, bio+2 or College of Sciences	150J1	analyze+1
80%	Hermit	DJ,CM	herbology+1, writing+1, PSI 1+ or Seminary	15J1	focus+1
80%	Locator	EU, DZ	research+2, locate+1 or locate+2, research+1	100J1	obtain+1
85%	Mage Thief	EV, BO, CJ	Journeyman Thief, PSI 2+	150J2	obtain+1
85%	Medium	ES, CF	Seminary, PSI 2+	150J1	relate+1
90%	Meta Mage	EF, CO, CX	Wizard's College, IQ 120+	150J1	relate+1
80%	Monk	CY,BR	writing+1, herbology+1, PSI 1+ or Seminary	30J2	focus+1
90%	Necromancer	BX,CX, FA	animate+1, shape+2 or Wizard's College	200J1	focus+1
90%	Oracle	ET, BJ, CH	Seminary, sight+2	100J2	observe+1
80%	Preacher	EG, EH	charisma 8+, neg+2 or Seminary, neg+1	100J1	converse+1
85%	Prophet	DI,DA	sight+3, charisma9+	50J4	relate+1
80%	Relic Hunter	BO, ER, CJ	locate+1, streetwise+1 or Seminary	100J2	obtain+1
90%	Runist	EX, EY, BI	writing+2, infusion+1 or Seminary, PSI 2+	150J2	embellish+1
90%	Sacerdote	CR,CH	writingt+1, history+1, PSI 2+ or Seminary, history+1	100J1	organize+1
70%	Sacristan	EQ, CE	mechanics+1, carpentry+1 or Seminary	70J1	build+1
85%	Sage	CH,CF,DS	sight+1, history+2	50J3	analyze+1
85%	Scribe	EN, CH, BI	writing+2, PSI 1+ or Seminary	100J1	embellish+1
85%	Seer	DI,CF	sight+1, communicate+1 or Wizard's College	150J1	observe+1

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65%	Sexton	EZ, CE	mechanics+2 or Seminary	50J1	repair+1
95%	Smith Mage	BL, CE, EE	Journeyman Smith, PSI 3+ or Wizard's Coll, smithing+1	150J2	build+1
90%	Sorcerer	BW,CX, FA	engines+2, infusion+2 or Wizard's College	250J1	relate+1
90%	Spiritualist	EA, EB, CG	geas+2, barrier+1 or Wizard's College	100J2	protect+1
95%	Templar	BF,CF,CM	blade+3, PSI 3+ or Military College, PSI 2+	100J2	protect+1
80%	Undead				
	Hunter	EC, CX, BH	command+2 or Wizard's College	50J4	protect+1
85%	Witch	BY,CT, FA	emotion+2, enhance+2	50J2	relate+1

WEAVE POINTS

THE FOLLOWING EDUCATIONS GAIN WEAVE POINTS:

Apprentice Wizard (or Equivalent)	0.5 weave points
Wizard's College	1.0 weave points
Seminary	0.6 weave points
Bard's College	0.4 weave points

THE FOLLOWING PROFESSIONS GAIN 0.3 WEAVE POINTS PER YEAR OF EMPLOYMENT:

Sorcerer Necromancer Hermit Celebrant

THE FOLLOWING PROFESSIONS GAIN 0.2 WEAVE POINTS PER YEAR OF EMPLOYMENT:

Fool	Spiritualist	Undead Hunter	Meta Mage	Exorcist
Witch	Hedge Wizard	Alchemist	Druid	Sacerdote
Champion	Hedge Priest	Healer	Seer	Prophet
Envoy	Smith Mage	Preacher	Cantor	Scribe
Sexton	Relic Hunter	Medium	Oracle	Mage Thief
Beadle	Anchorite	Runist		

THE FOLLOWING PROFESSIONS GAIN 0.1 WEAVE POINTS PER YEAR OF EMPLOYMENT:

Bard	Jongleur	Templar	Monk	Acolyte
Cleric	Friar	Godsmith	Deacon	Sacristan
Locator				

STARCLUSTER - CHARACTER GENERATION

TABLE 6: SKILLS TABLES

Skill Table	1	2	3	4	5	6	7
A	chemistry+1	chemistry+1	biology+1	minerol+1	planetology+1	planetology+1	chemistry+2
B	pilot+1	ships guns+1	astronomy+1	navigation+1	smallcraft+1	leadershia+1	pilot+2
C	tactics+1	strategy+1	beam+1	melee+1	driving+1	leadership+1	strategy+2
D	biology+1	biology+1	chemistry+1	minerology+1	biology+1	chemistry+1	biology+2
E	streetwise+1	streetwise+1	drug+1	business+1	charisma+1	melee+1	streetwise+2
F	gun+1	beam+1	blade+1	melee+1	unarmed+1	gyrojet+1	gun+2
G	disg+1	streetwise+1	drug+1	melee+1	psychology+1	charisma+1	psychology+2
H	charisma+1	charisma+1	streetwise+1	business+1	prog+1	drugs+1	charisma+2
I	prog+1	prog+1	electronics+1	electronics+1	business+1	prog+1	prog+2
J	business+1	business+1	prog+1	melee+1	driving+1	business+1	business+2
K	strength+1	coordination+1	agility+1	endurance+1	strength+1	endurance+1	endurance+2
L	sociology+1	sociology+1	prog+1	prog+1	drug+1	streetwise+1	sociology+2
M	planetology+1	planetology+1	biology+1	astronomy+1	astronomy+1	pilot+1	pilot+2
N	drives+1	mechanics+1	drives+1	electronics+1	mechanics+1	drives+1	drives+2
O	pilot+1	astronomy+1	melee+1	gun+1	gyrojet+1	drug+1	astronomy+2
P	streetwise+1	streetwise+1	charisma+1	sociology+1	psychology+1	psychology+1	psychology+2
Q	prog+1	drug+1	prog+1	business+1	sociology+1	psychology+1	sociology+2
R	strength+1	agility+1	gun+1	melee+1	unarmed+1	drug+1	gun+2
S	chemistry+1	biology+1	psychology+1	astronomy+1	sociology+1	planetology+1	any named+2
T	shield+1	TK+1	stun+1	interrogate+1	healing+1	pyrokinesis+1	kill+1
U	streetwise+1	drug+1	streetwise+1	drug+1	unarmed+1	driving+1	unarmed+2
V	law+1	law+1	drug+1	psychology+1	psychology+1	sociology+1	law+2
W	diag+1	biology+1	drug+1	psychology+1	treatment+1	treatment+1	treatment+2
X	biology+1	biology+1	surgery+1	surgery+1	drug+1	drug+1	surgery+2
Y	minerology+1	minerology+1	chemistry+1	nav+1	ships guns+1	planetology+1	minerology+2
Z	driving+1	driving+1	melee+1	gun+1	coordination+1	mechanics+1	driving+2
AA	dash+1	gyrojet+1	smallcraft+1	blade+1	stash+1	pilot+1	dash+2
AB	dash+1	gun+1	stash+1	negotiate+1	business+1	pilot+1	stash+2
AC	linguistics+1	business+1	negotiate+1	linguistics+1	negotiate+1	unarmed+1	negotiate+2
AD	prog+1	physics+1	mechanics+1	electronics+1	physics+1	research+1	physics+2
AE	linguistics+1	prog+1	negotiate+1	business+1	inguistics+1	research+1	linguistics+2
AF	coordination+1	endurance+1	pilot+1	smallcraft+1	driving+1	mechanics+1	driving+2
AG	writing+1	linguistics+1	prog+1	writing+1	negotiate+1	research+1	writing+2
AH	painting+1	sculpture+1	coordination+1	prog+1	painting+1	sculpture+1	painting+2
AI	music+1	endurance+1	prog+1	music+1	oordination+1	electronics+1	music+2
AJ	history+1	writing+1	research+1	low tech+1	history+1	linguistics+1	history+2
AK	blade+1	melee+1	low tech+1	history+1	low tech+1	endurance+1	low tech+2
AL	research+1	writing+1	endurance+1	research+1	writing+1	prog+1	research+2
AM	agility+1	coordination+1	agility+1	strength+1	charisma+1	endurance+1	agility+2
AN	endurance+1	charisma+1	gun+1	stash+1	smallcraft+1	prog+1	smallcraft+2
AO	negotiate+1	business+1	writing+1	negotiate+1	business+1	research+1	negotiate+2
AP	stash+1	beam+1	dash+1	negotiate+1	research+1	prog+1	stash+2
AQ	sociology+1	research+1	sociology+1	psychology+1	research+1	prog+1	psychology+2
AR	streetwise+1	drug+1	charisma+1	streetwise+1	unarmed+1	drug+1	streetwise+2
AS	negotiate+1	business+1	streetwise+1	research+1	law+1	psychology+1	psychology+2
AT	smallcraft+1	beam+1	gyrojet+1	smallcraft+1	dash+1	driving+1	smallcraft+2
AU	TK+1	pyrokinesis+1	stun+1	TK+1	interrogate+1	shield+1	TK+2
AV	mechanics+1	electronics+1	charisma+1	coordination+1	drug+1	electronics+1	mechanics+2
AW	low tech+1	history+1	sociology+1	research+1	mechanics+1	research+1	low tech+2
AX	gun+1	melee+1	unarmed+1	endurance+1	agility+1	negotiate+1	melee+2

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AY	IQ+5	coord+1	research+1	low tech+1	mechanics+1	writing+1	IQ+10
AZ	strategy+1	tactics+1	leadership+1	research+1	negotiate+1	rank+1	tactics+2
BA	chemistry+1	chemistry+1	biology+1	minerology+1	astronomy+1	astronomy+1	chemistry+2
BB	steering+1	engines+1	astronomy+1	course+1	sailing+1	leadership+1	steering+2
BC	tactics+1	strategy+1	bow+1	melee+1	riding+1	leadership+1	strategy+2
BD	biology+1	biology+1	chemistry+1	minerology+1	biology+1	chemistry+1	biology+2
BE	streetwise+1	streetwise+1	drug+1	business+1	charisma+1	melee+1	streetwise+2
BF	bow+1	bow+1	blade+1	melee+1	unarmed+1	blade+1	blade+2
BG	riding+1	riding+1	bow+1	training+1	dash+1	leadership+1	riding+2
BH	tracking+1	snare+1	cooking+1	drinking+1	survival+1	climbing+1	tracking+2
BI	painting+1	painting+1	writing+1	taste+1	forgery+1	carpentry+1	painting+2
BJ	law+1	charisma+1	writing+1	law+1	psychology+1	negotiate+1	law+2
BK	weaving+1	business+1	weaving+1	taste+1	melee+1	drinking+1	melee+2
BL	smithing+1	strength+1	minerology+1	smithing+1	carpentry+1	mechanics+1	smithing+2
BM	chemistry+1	tanning+1	tanning+1	cooking+1	streetwise+1	chemistry+1	tanning+2
BN	bow+1	snare+1	survival+1	cooking+1	tracking+1	tanning+1	survival+2
BO	taste+1	streetwise+1	picking+1	sneaking+1	gymnastics+1	climbing+1	sneaking+2
BP	sleight+1	alertness+1	streetwise+1	sneaking+1	sleight+1	picking+1	sleight+2
BQ	tanning+1	smithing+1	cooking+1	business+1	streetwise+1	tanning+1	streetwise+2
BR	husbandry+1	cooking+1	husbandry+1	strength+1	endurance+1	herbology+1	husbandry+2
BS	blade+1	engines+1	streetwise+1	gymnastics+1	dash+1	stash+1	dash+2
BT	engines+1	dash+1	gymnastics+1	leadership+1	law+1	engines+1	engines+2
BU	masonry+1	strength+1	masonry+1	drinking+1	carpentry+1	minerology+1	masonry+2
BV	sculpting+1	drugs+1	masonry+1	sculpting+1	smithing+1	climbing+1	sculpting+2
BW	infuse+1	shape+1	energy+1	duration+1	proxy+1	apport+1	infuse+2
BX	animate+1	proxy+1	shape+1	boost+1	emotion+1	command+1	command+2
BY	augment+1	herbology+1	seeming+1	emotion+1	sight+1	adhere+1	emotion+2
BZ	music+1	history+1	writing+1	music+1	linguistics+1	taste+1	music+2
CA	music+1	writing+1	music+1	writing+1	negotiate+1	blade+1	writing+2
CB	agility+1	blade+1	riding+1	tracking+1	streetwise+1	music+1	blade+2
CC	strength+1	coord+1	agility+1	endurance+1	strength+1	endurance+1	strength+2
CD	strength+1	endurance+1	coord+1	agility+1	coord+1	agility+1	coordination+2
CE	smithing+1	mechanics+1	carpentry+1	mechanics+1	research+1	history+1	mechanics+2
CF	research+1	history+1	research+1	sociology+1	history+1	sociology+1	research+2
CG	drinking+1	streetwise+1	negotiate+1	cooking+1	unarmed+1	psychology+1	streetwise+2
CH	writing+1	business+1	cooking+1	writing+1	history+1	linguistics+1	writing+2
CI	engines+1	riding+1	engines+1	survival+1	masonry+1	linguistics+1	engines+2
CJ	blade+1	bow+1	alertness+1	drinking+1	unarmed+1	climbing+1	drinking+2
CK	melee+1	alertness+1	drinking+1	alertness+1	cooking+1	survival+1	alertness+2
CL	husbandry+1	training+1	husbandry+1	streetwise+1	drinking+1	unarmed+1	husbandry+2
CM	augment+1	rapport+1	geas+1	barrier+1	enhance+1	emotion+1	augment+2
CN	seeming+1	communic+1	sight+1	shape+1	transfer+1	telekinesis+1	seeming+2
CO	charisma+1	negotiate+1	business+1	negotiate+1	streetwise+1	sociology+1	streetwise+2
CP	cooking+1	herbology+1	drinking+1	taste+1	cooking+1	chemistry+1	cooking+2
CQ	transfer+1	command+1	geas+1	animate+1	shield+1	barrier+1	geas+2
CR	rapport+1	memory+1	enhance+1	shape+1	duration+1	communic+1	memory+2
CS	swimming+1	sailing+1	endurance+1	weather+1	streetwise+1	steering+1	steering+2
CT	forestry+1	carpentry+1	forestry+1	survival+1	cooking+1	climbing+1	forestry+2
CU	barrier+1	command+1	geas+1	rapport+1	energy+1	communic+1	barrier+2
CV	unarmed+1	strength+1	agility+1	unarmed+1	endurance+1	coord+1	unarmed+2
CW	endurance+1	agility+1	charisma+1	streetwise+1	gymnastics+1	swimming+1	agility+2
CX	shield+1	Telekinesis+1	shield+1	interrogate+1	transfer+1	transfer+1	shield+2
CY	communic+1	augment+1	memory+1	herbology+1	husbandry+1	unarmed+1	communicate+2
CZ	sleight+1	alertness+1	emotion+1	enhance+1	writing+1	streetwise+1	alertness+2

STARCLUSTER - CHARACTER GENERATION

DA	law+1	communic+1	sociology+1	memory+1	shape+1	durance+1	law+2
DB	command+1	streetwise+1	survival+1	negotiate+1	emotion+1	sight+1	emotion+2
DC	drinking+1	strength+1	melee+1	sneaking+1	picking+1	streetwise+1	melee+2
DD	coord+1	agility+1	negotiate+1	sleight+1	gymnastics+1	sleight+1	gymnastics+2
DE	sleight+1	coord+1	sleight+1	streetwise+1	negotiate+1	streetwise+1	sleight+2
DF	carpentry+1	masonry+1	smithing+1	weaving+1	sculpting+1	tanning+1	carpentry+2
DG	carpentry+1	sculpting+1	forestry+1	sculpting+1	painting+1	taste+1	sculpting+2
DH	herbology+1	sight+1	dowsing+1	rapport+1	survival+1	endurance+1	dowsing+2
DI	sight+1	communic+1	seeming+1	shape+1	enhance+1	shield+1	sight+2
DJ	sight+1	charisma+1	energy+1	dowsing+1	emotion+1	command+1	command+2
DK	riding+1	forestry+1	dowsing+1	survival+1	sneaking+1	swimming+1	swimming+2
DL	disguise+1	sneaking+1	disguise+1	picking+1	linguistics+1	negotiate+1	disguise+2
DM	disguise+1	sneaking+1	sleight+1	forgery+1	herbology+1	drug+1	sneaking+2
DN	training+1	husbandry+1	training+1	climbing+1	alertness+1	weather+1	training+2
DO	snare+1	tanning+1	melee+1	tracking+1	survival+1	herbology+1	snare+2
DP	riding+1	rank+1	blade+1	blade+1	leadership+1	tactics+1	riding+2
DQ	law+1	picking+1	disguise+1	sneaking+1	streetwise+1	psychology+1	law+2
DR	taste+1	minerology+1	coord+1	business+1	minerology+1	business+1	taste+2
DS	writing+1	taste+1	psychology+1	writing+1	streetwise+1	linguistics+1	writing+2
DT	psychology+1	streetwise+1	psychology+1	business+1	research+1	history+1	psychology+2
DU	brewing+1	drinking+1	brewing+1	cooking+1	herbology+1	chemistry+1	brewing+2
DV	blade+1	strength+1	blade+1	coord+1	unarmed+1	dash+1	blade+2
DW	mining+1	minerology+1	mining+1	masonry+1	carpentry+1	endurance+1	mining+2
DX	mechanics+1	smithing+1	mechanics+1	carpentry+1	tanning+1	masonry+1	smithing+2
DY	surgery+1	treatment+1	psychology+1	diagnose+1	psychology+1	herbology+1	diagnose+2
DZ	drinking+1	streetwise+1	melee+1	stash+1	business+1	drug+1	drinking+2
EA	apport+1	interrogate+1	apport+1	command+1	proxy+1	barrier+1	command+2
EB	communic+1	sight+1	durance+1	rapport+1	barrier+1	geas+1	rapport+2
EC	barrier+1	enhance+1	energy+1	command+1	durance+1	sight+1	energy+2
ED	apport+1	barrier+1	communic+1	enhance+1	memory+1	seeming+1	apport+2
EE	infuse+1	durance+1	energy+1	shape+1	command+1	proxy+1	infuse+2
EF	link+1	free+1	discover+1	suspend+1	add+1	trigger+1	link+2
EG	augment+1	matter+1c	ommand+1	durance+1	emotion+1	enhance+1	emotion+2
EH	negotiate+1	history+1	linguistics+1	writing+1	leadership+1	sociology+1	negotiate+2
EI	join+1	connect+1	matter+1	link+1	enhance+1	emotion+1	connect+2
EJ	energy+1	durance+1	command+1	emotion+1	join+1	enhance+1	enhance+2
EK	free+1	suspend+1	discover+1	command+1	link+1	interrogate+1	command+2
EL	join+1	attract+1	resistance+1	energy+1	connect+1	command+1	join+2
EM	script+1	enhance+1	free+1	add+1	communic+1	motion+1	communicate+2
EN	script+1	durance+1	enhance+1	memory+1	sight+1	memory+1	memory+2
EO	infuse+1	durance+1	emotion+1	proxy+1	connect+1	shape+1	infuse+2
EP	interrogate+1	communic+1	memory+1	business+1	history+1	law+1	memory+2
EQ	durance+1	resistance+1	attract+1	enhance+1	research+1	sculpting+1	durance+2
ER	locate+1	join+1	apport+1	enhance+1	interrogate+1	proxy+1	locate+2
ES	connect+1	join+1	matter+1	locate+1	discover+1	command+1	connect+2
ET	connect+1	sight+1	memory+1	rapport+1	seeming+1	link+1	sight+2
EU	locate+1	proxy+1	interrogate+1	research+1	sneaking+1	streetwise+1	locate+2
EV	locate+1	interrogate+1	seeming+1	shape+1	apport+1	enhance+1	locate+2
EW	link+1	suspend+1	memory+1	energy+1	augment+1	drug+1	link+2
EX	join+1	script+1	add+1	durance+1	geas+1	trigger+1	script+2
EY	infuse+1	memory+1	proxy+1	script+1	durance+1	join+1	infuse+2
EZ	join+1	attract+1	resistance+1	locate+1	durance+1	seeming+1	attract+2
FA	script+1	adhere+1	transfer+1	resistance+1	matter+1	energy+1	script+2
FB	shipbuilding+1	sailing+1	physics+1	mechanics+1	shipbuilding+1	physics+1	shipbuilding+2

STARCLUSTER - CHARACTER GENERATION

FC	pilot+1	zero-G+1	pilot+1	electronics+1	zero-G+1	drives+1	zero-G+2
FD	driving+1	gunnery+1	mechanics+1	electronics+1	driving+1	gunnery+1	gunnery+2
FE	driving+1	drives+1	gunnery+1	driving+1	drives+1	gunnery+1	driving+2
FF	swim+1	endurance+1	swim+1	mechanics+1	biology+1	chemistry+1	swim+2
FG	music+1	charisma+1	rank+1	music+1	negotiation+1	charisma+1	charisma+2
FH	treatment+1	strength+1	diagnosis+1	coord+1	treatment+1	biology+1	treatment+2
FI	heal+1	psychology+1	sleight+1	coord+1	psychology+1	heal+1	heal+2
FJ	unarmed+1	melee+1	blade+1	unarmed+1	melee+1	blade+1	melee+2
FK	mechanics+1	electronics+1	melee+1	drinking+1	melee+1	unarmed+1	drinking+2
FL	cybernetics+1	mechanics+1	cybernetics+1	electronics+1	prog+1	prog+1	cybernetics+2
FM	driving+1	mechanics+1	driving+1	prog+1	mechanics+1	driving+1	driving+2
FN	genetics+1	biology+1	prog+1	genetics+1	biology+1	prog+1	genetics+2
FO	navigation+1	prog+1	interrogate+1	biology+1	navigation+1	interrog+1	navigation+2
FP	ships guns+1	electronics+1	mechanics+1	ships guns+1	electronics+1	mechanics+1	shipsguns+2
FQ	zero-G+1	driving+1	electronics+1	zero-G+1	mechanics+1	driving+1	zero-G+2
FR	electronics+1	cryptography+1	demolition+1	electronics+1	demolition+1	cryptography+1	demolition+2
FS	cryptography+1	prog+1	electronics+1	prog+1	cryptography+1	electronics+1	cryptography+2
FT	demolition+1	electronics+1	demolition+1	prog+1	demolition+1	mechanics+1	demolition+2
FU	diagnosis+1	biology+1	drug+1	biology+1	diagnosis+1	drug+1	drug+2
FV	treatment+1	surgery+1	drug+1	diagnosis+1	surgery+1	drug+1	surgery+2
FW	gun+1	alertness+1	melee+1	alertness+1	gun+1	melee+1	alertness+2
FX	evaluate+1	business+1	taste+1	negotiate+1	evaluate+1	business+1	evaluate+2
FY	interrogate+1	psychology+1	streetwise+1	interrogate+1	business+1	psychology+1	interrogate+2
FZ	disguise+1	psychology+1	taste+1	negotiate+1	streetwise+1	psychology+1	disguise+2
GA	aquaculture+1	aquaculture+1	biology+1	minerology+1	husbandry+1	swim+1	aquaculture+2
GB	minerology+1	minerology+1	biology+1	biology+1	aquaculture+1	swim+1	minerology+2
GC	mechanics+1	swim+1	minerology+1	mechanics+1	electronics+1	strength+1	mechanics+2
GD	chemistry+1	minerology+1	chemistry+1	electronics+1	mechanics+1	minerology+1	chemistry+2
GE	endurance+1	research+1	swim+1	electronics+1	research+1	agility+1	research+2
GF	aquaculture+1	husbandry+1	husbandry+1	swim+1	swim+1	agility+1	husbandry+2
GG	swim+1	charisma+1	history+1	swim+1	research+1	history+1	swim+2
GH	climbing+1	forestry+1	endurance+1	climbing+1	history+1	planetology+1	climbing+2
GI	blade+1	bow+1	melee+1	drug+1	unarmed+1	climbing+1	drug+2
GJ	husbandry+1	forestry+1	low tech+1	climbing+1	husbandry+1	climbing+1	husbandry+2
GK	electronics+1	construction+1	mechanics+1	electronics+1	construction+1	mechanics+1	construction+2
GL	disguise+1	alien psych+1	prog+1	unarmed+1	gun+1	law+1	alien psych+2
GM	alien psych+1	negotiation+1	business+1	alien psych+1	negotiation+1	business+1	alien psych+2
GN	forestry+1	melee+1	biology+1	melee+1	biology+1	forestry+1	forestry+2
GO	intimidation+1	streetwise+1	negotiation+1	intimidation+1	gun+1	business+1	intimidation+2
GP	small craft+1	prog+1	ships guns+1	small craft+1	ships guns+1	prog+1	small craft+2
GQ	evaluate+1	construction+1	small craft+	evaluate+1	mechanics+1	electronics+1	evaluate+2
GR	zero-G+1	small craft+1	zero-G+1	construction+1	small craft+1	prog+1	zero-G+2
GS	drives+1	zero-G+1	mechanics+1	electronics+1	zero-G+1	evauationl+	zero-G+2
GT	swim+1	endurance+1	course+1	endurance+1	course+1	agility+1	course+2
GU	mechanics+1	driving+1	course+1	electronics+1	driving+1	mechanics+1	driving+2
GV	taste+1	psychology+1	business+1	taste+1	psychology+1	business+1	taste+2

STARCLUSTER - CHARACTER GENERATION

GENERAL APPEARANCE

Roll or choose one from each column

2d10

Roll	Face	Eyes	Nose	Mouth	Other	Demeanor
2	Round	Round	Wide	Thick	Small Eyes	Slouched
3	Round	Round	Wide	Thick	Close-set Eyes	Nervous
4	Round	Round	Wide	Thick	Heavy Brow	Scarred
5	Narrow	Narrow	Beaked	Hard	Broad Brow	Bitter
6	Narrow	Narrow	Beaked	Hard	Large Eyes	Hard
7	Narrow	Narrow	Beaked	Hard	Shadowed Eyes	Lean
8	Heart	Tilted	Straight	Soft	Piercing Eyes	Soft
9	Heart	Tilted	Straight	Soft	High Cheeks	Graceful
10	Heart	Tilted	Straight	Soft	Rosy Cheeks	Gentle
11	Oval	Slanted	Small	Small	Hollow Cheeks	Straight
12	Oval	Slanted	Small	Small	Freckles	Neat
13	Oval	Slanted	Small	Small	Visible Moles	Quick
14	Oval	Slanted	Small	Small	Mottled Skin	Dainty
15	Pointed	Pop	Sharp	Thin	Cleft Chin	Fluid
16	Pointed	Pop	Sharp	Thin	Long Earlobes	Awkward
17	Pointed	Pop	Sharp	Thin	Tattooed	Hulking
18	Square	Pouched	Bulbed	Wide	Long Fingers	Slow
19	Square	Pouched	Bulbed	Wide	Large Hands	Pensive
20	Square	Pouched	Bulbed	Wide	Six Fingers	Sloppy

Character Traits

Roll or choose one from each column

2d6

Roll	Music	Sports	Trivox	Reading	Miscellaneous
2	Hates	Hates	Hates	Never	History Buff
3	Hates	Hates	Hates	Never	Tinkerer
4	Dislikes	Dislikes	Dislikes	Seldom	Builds Models
5	Indifferent	Indifferent	Indifferent	Occasionally	Enjoys Dancing
6	Enjoys	Enjoys	Enjoys	Occasionally	Collects Things
7	Enjoys	Enjoys	Enjoys	Often	Gamer
8	Fan	Fan	Fan	Often	Gambler
9	Fan	Fan	Fan	Always	Hunts
10	Loves	Loves	Loves	Always	Gourmet
11	Plays	Plays	Addict	Addict	Drug Addict
12	Plays	Plays	Addict	Addict	Alcoholic

Note: Book of Jalan & TL 1-6 characters should replace Trivox with Plays.

Tech Level 7 should replace Trivox with Television.

STARCLUSTER - CHARACTER GENERATION

Character Descriptive Characteristics

Sastras: Roll three times on Body Fur Color. The first color is the Mane. The Lighter of the next two rolls is the Belly Fur, the other being the Body Fur. Roll once each for Skin and Eye Color.

Vantors: Roll once on Skin color. Then roll 1d6 times on Eye Color for Skin Pattern Colors. Roll once more on Eye Color for eyes.

Tagris: Roll as a Human.

Human: Roll once each on Hair, Eye and Skin Color.

Note: A choice can be made instead of any roll. SaHus, VaHus, and HuTas roll or choose as is appropriate. **Book of Jalan** characters roll or choose as Humans.

%D Roll	Hair /Mane Body Fur Color	Eye Color	Skin Color
01-05	White	Pink	Albino
06-10	Platinum Blonde	Pale Blue	Pale White
11-15	Pale Blonde	Sky Blue	Pale Pink
16-20	Light Blonde	Dark Blue	Ruddy
21-25	Medium Blonde	Sapphire	Creamy
26-30	Ash Blonde	Blue-Green	Tan
31-35	Strawberry Blonde	Pale Grey	Yellow Tan
36-40	Light Auburn	Steel Grey	Yellow Brown
41-45	Sherry	Grey-Green	Deep Yellow
46-50	Copper	Light Green	Light Copper
51-55	Dark Auburn	Leaf Green	Dark Copper
56-60	Sandy	Dark Green	Swarthy
61-65	Light Brown	Emerald	Light Olive
66-70	Soft Brown	Hazel	Dark Olive
71-75	Medium Brown	Amber	Cafe Au Lait
76-80	Dark Brown	Light Brown	Light Brown
81-85	Chocolate Brown	Dark Brown	Dark Brown
86-90	Jet	Chocolate Brown	Chocolate brown
91-93	Raven	Jet	Jet
94-96	Grey	Chrome*	Green*
97-98	Pink*	Ruby*	Orange*
99	Blue*	Amethyst*	Red*
00	Fuscia*	Coral*	Purple*

*Represents various possible dyes. These colors are non-natural and are manufactured only at TL 7+

Book of Jalan Character Height and Weight tables (roll or choose)

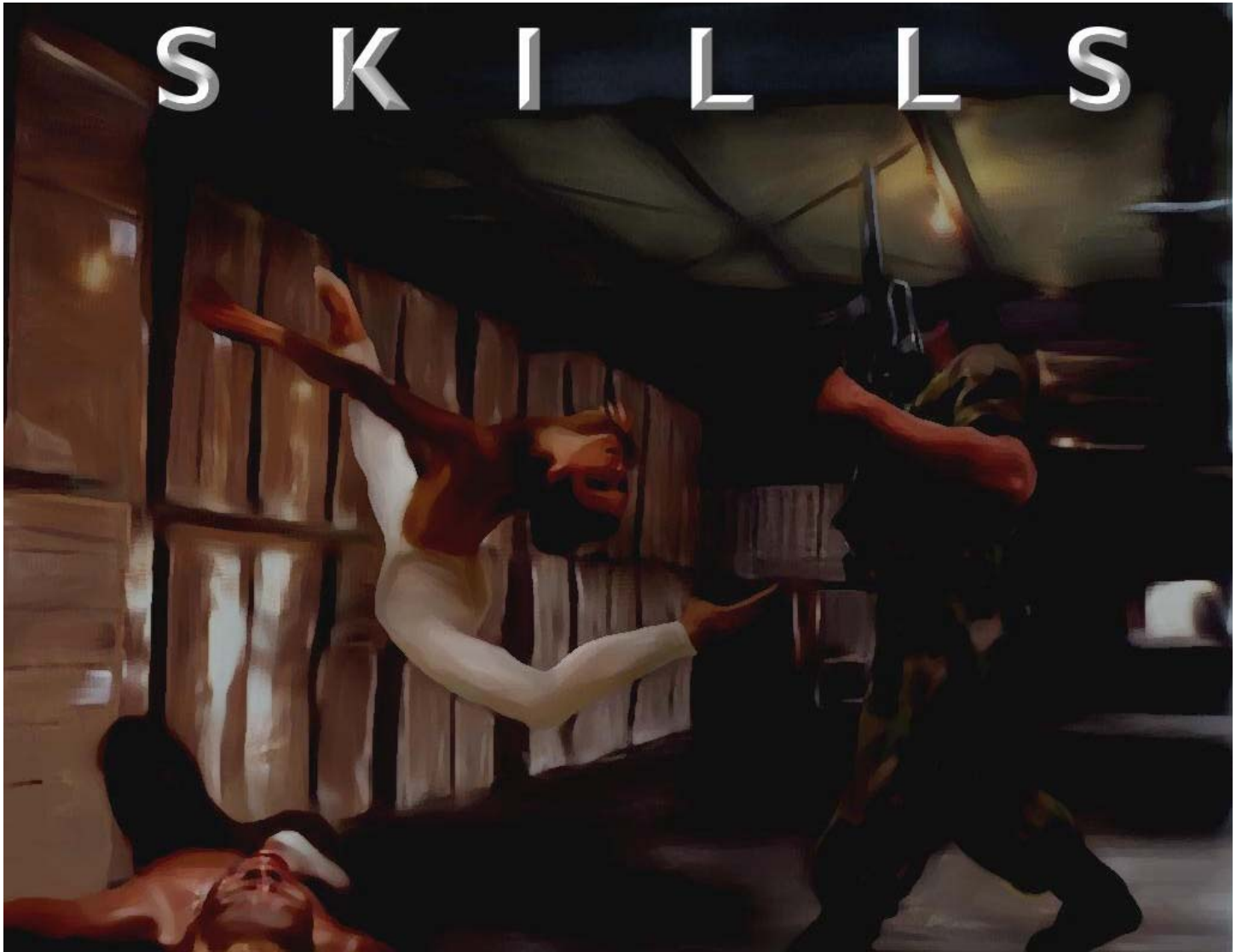
STARCLUSTER - CHARACTER GENERATION

Ranges By Race

	Halfling	Gnome	Elf	Half-Elf
Male Height	03-06	03-06	09-25	16-35
Female Height	01-05	02-06	07-20	11-30
Male Weight	11-40	6-35	31-70	41-80
Female Weight	01-30	6-38	21-55	31-70

	Dwarf	Half-Orc	Human
Male Height	06-10	36-00	16-96
Female Height	04-08	31-90	11-80
Male Weight	56-93	76-00	31-00
Female Weight	51-85	66-90	26-93

%d Roll	Height	Weight
01-02	3'3"	44#
03	3'5"	46#
04-05	3'7"	48#
06	3'10"	50#
07-08	4'6"	51#
09-10	4'9"	54#
11-15	5'0"	57#
16-20	5'4"	64#
21-25	5'7"	70#
26-30	5'9"	77#
31-35	5'11"	84#
36-40	6'0"	97#
41-45	6'1"	106#
46-50	6'2"	112#
51-55	6'3"	121#
56-60	6'4"	132#
61-65	6'5"	143#
66-70	6'6"	154#
71-75	6'7"	165#
76-80	6'10"	176#
81-85	7'0"	187#
86-90	7'3"	202#
91-93	7'6"	216#
94-96	7'10"	242#
97-98	8'6"	264#
99	9'6"	308#
00	9'10"	396#



STARCLUSTER

GUIDE TO SKILLS AND METASKILLS

BY CLASH BOWLEY

SKILLS AND METASKILLS - 54 -

STARCLUSTER - SKILLS AND METASKILLS

Skills and Metaskills

All skills work at a base chance of success of 45% at level+1, and 5% is added per level of skill. Each skill has a characteristic which modifies it's chance of success - either a physical characteristic such as strength, coordination, agility, endurance, or charisma - or IQ. Physical stats modify the chance of success at a rate of 5% for every 2 points over 7 - i.e. at 9, 11, 13, etc. IQ modifies by 1 per point of IQ over 120 - i.e. at an IQ of 137, the modifier would be +17.

Skills may be used at +0 - no skill - by rolling the modifying stat or lower on percentile die unless the modifying stat is IQ, which receives a 10% chance. Example: Climb+0. Modifying stat is Agility. Character has an Agility of 11 so the character can climb with a roll of 11 or less on percentile dice. Example: Biology+0. Modifying stat is IQ. Character has a flat 10% chance of success. High modifying stats give no other additional bonuses to success. Skills in shaded rows are psionic skills and require one PSI point to use

When to use skills

Skills should only be rolled if a normally competent individual would have trouble. For example, climbing a ladder would not require a climb skill check, whereas climbing a mountain would. Riding a horse would not normally require a riding check, while shooting from horseback would. If GM keeps in mind the 'Normally Competent Individual' concept, the number of rolls, and thus the number of player failures, will be kept to a meaningful minimum.



STARCLUSTER - SKILLS AND METASKILLS

Star Cluster - Skills

Skill	Description	Governing Attribute
adapt [adapt]	<i>To change to accommodate new and unfamiliar circumstances, use unfamiliar materials, learn new methods, etc.</i>	Charisma
alert [alert]	<i>The ability to stay alert without sleep</i>	Endurance
alien (alien psychology)	<i>The ability to understand the hidden drives behind an alien's actions. Separate skills are used for each type of alien. As in Kiskit Psychology, Guarú Psychology, etc.</i>	Charisma
aqua [Aquaculture]	<i>The knowledge of growing plants and animals underwater</i>	IQ
astr [(astronomy)]	<i>The ability to use instruments to find matter and energy in space</i>	IQ
beam (beam)	<i>The ability to effectively use energy weapons in combat</i>	Coordination
bio (biology)	<i>The study of plants and animals and their effects on mankind</i>	IQ
blade (blade)	<i>The ability to effectively use cutting weapons in combat</i>	Strength
bow [bow]	<i>The ability to effectively use bow weapons in combat</i>	Coordination
brew [brew]	<i>The ability to make beer and wines</i>	IQ
bus (business)	<i>The ability to bargain, buy, sell inventory, bribe, and otherwise use money effectively</i>	Charisma
carp [carpentry]	<i>The ability to shape wood into useful tools and furniture</i>	Coordination
climb [climb]	<i>The ability to climb walls, cliffs, and trees</i>	Agility
const (construction)	<i>The ability to build structures from available components</i>	Endurance
cook [cook]	<i>The ability to cook nutritious and palatable meals</i>	IQ
crs [course]	<i>The ability to navigate a course</i>	IQ

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
crypt [cryptography]	<i>The ability to encrypt and decrypt data, and the ability to create new types of encryption</i>	IQ
cyber [cybernetics]	<i>The ability to create and repair robots.</i>	IQ
dash (dash)	<i>Daring and movement which sweeps all before it. A success means the character has performed a marvellous feat and opponents attempting to hit the dashing character have a -5 per level of dash to hit.</i>	Agility
demo [demolition]	<i>The ability to use explosives</i>	IQ
diag (diagnosis)a cure	<i>The ability to identify an injury or disease before attempting</i>	IQ
disg (disguise)or thingusing makeup and prosthetics	<i>The ability to change the outwardappearance of some person</i>	Charisma
dowse [dowse]	<i>The ability to find water in a 3 meter radius</i>	IQ
drink [drinking]	<i>The ability to consume large quantities of alcoholic beverages</i>	Endurance
driv (driving)	<i>The ability to drive any planetbound craft</i>	Coordination
drives (drives)	<i>The ability to build, repair, and operate reaction drives</i>	IQ
drug (drug)	<i>The ability to use and make drugs to cause and cure injury, illness, or sensory abnormalities</i>	IQ
elec (electronics)	<i>The ability to make or repair electrical and electronic devices</i>	IQ
eng [engines]	<i>The ability to use mechanically powered siege engines</i>	Coordination
endear [endear]	<i>To make yourself liked by charm or flattery used on a target</i>	Charisma
engrace [engrace]	<i>To fill one's movements with grace and eloquence</i>	Charisma
entice [entice]	<i>To lure or bait someone or something with hints of pleasurable reward</i>	Charisma

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
eval (evaluation)	<i>The ability to quickly assess the value of something</i>	Charisma
for [forestry]	<i>The ability to select trees for certain desirable characteristics</i>	IQ
forge [forgery]	<i>The ability to convincingly create documents which appear official</i>	Coordination
goad [goad]	<i>To force people into action by annoying and pestering them, without controlling which action the recipient of the goading will take</i>	Charisma
gun (gun)	<i>The ability to effectively aim recoil-inducing high-speed projectile weapons</i>	Coordination
gunnery (gunnery)	<i>The ability to effectively use cannon and other large, mounted guns</i>	Coordination
gym [gymnastics]	<i>The ability to make leaps, somersaults and other gymnastic moves</i>	Agility
gyrojet (gyrojet)	<i>The ability to effectively use self-propelled weapons in combat</i>	Coordination
heal (heal)	<i>The ability to psionically heal or cause 50 points of damage per level of skill</i>	IQ
herb [herbology]	<i>The ability to use plants and extracts to heal or harm</i>	IQ
hist (history)	<i>Knowledge of history</i>	IQ
hus [husbandry]	<i>The ability to care for plants and animals</i>	IQ
interr (interrogate)	<i>The ability to retrieve three words of useful information per level from another person's mind</i>	IQ
intim (intimidation)	<i>The ability to bluff and deceive others as to one's true strength</i>	Charisma
kill (kill)	<i>The ability to kill instantly with psionics</i>	IQ
lang (linguistics)principles	<i>The ability to speak & comprehend languages from basic</i>	IQ
law (law)	<i>The ability to use, circumvent, and deal with law, and project an entire system from a few examples</i>	IQ

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
lea (leadership)	<i>The ability to take command of others by making them want to follow</i>	Charisma
itech (low tech)	<i>Knowledge and use of low tech items</i>	IQ
mason [masonry]	<i>The ability to build things out of stone</i>	Strength
melee (melee)	<i>The ability to efficiently use non-blade hand held weapons in combat</i>	Strength
min [mineralogy]	<i>The study of minerals</i>	IQ
mine [mining]	<i>The ability to tunnel under the ground, through earth and stone, using simple tools</i>	Endurance
mus (music)	<i>The ability to express oneself in the medium of sound</i>	Charisma
nav (navigation)	<i>The ability to set up and effect an interstellar jump and transfer souls with special equipment. Level of nav skill influences jump duration</i>	Endurance
neg (negotiation)	<i>The ability to sway another to your point of view</i>	Charisma
operate (operate)	<i>To use common machinery native to your culture's tech level</i>	IQ
overdo (overdo)	<i>To push oneself past ones usual limits with a penalty to be paid later.</i>	Endurance
paint [painting]	<i>The ability to express oneself in pictures</i>	Coordination
pick [pick]	<i>The ability to open locked doors using simple metal tools</i>	Coordination
pilot (pilot)	<i>The ability to operate a space faring craft at sub-light speeds If no pilot skill, use small craft/2</i>	Coordination
plan (planetology)	<i>The study of planetary ecologies</i>	IQ
pro [programming]	<i>The ability to program and operate computer related devices Affects which station one can operate aboard a spacecraft</i>	IQ
phys (physics)	<i>The study of the fundamental rules governing the Universe</i>	IQ

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
psyc (psychology)	<i>The ability to understand the hidden drives behind people's actions</i>	Charisma
pyr (pyrokinesis)	<i>The ability to create and throw fire psionically</i> Damage = 50 per level of pyr skill	Coordination
react (react)	<i>To move quickly without thinking to avoid an avoidable danger.</i>	Agility
res (research)	<i>The ability to find out information on a given subject</i>	Endurance
ride [riding]	<i>The ability to ride an animal or open seated vehicle in complex maneuvers</i>	Agility
rope [rope use]	<i>The ability to efficiently use ropes and knots</i>	Coordination
sail [sailing]	<i>Knowledge of sails and sailing</i>	Strength
sculpt (sculpture)	<i>The ability to express oneself in creating 3 dimensional objects</i>	Coordination
shguns (ship's guns)	<i>The ability to use ship's energy weapons in space combat</i> Level of shguns affects space combat	Coordination
ship [shipbuilding]	<i>The ability to construct a waterborne ship using wood and other natural materials</i>	IQ
shield (shield)	<i>The ability to avoid the effects of any psionic intrusion</i> Against normal attack, functions as armor - +1 = ballistic, +2 = steel, +3 = ceramic, +4 = plasteel, +5 = plasteel or chromskin, whichever is better.	Agility
slt [sleight]	<i>The ability to use sleight-of-hand tricks</i>	Coordination
smcraft (small craft)	<i>The ability to pilot pods (spacecraft 100 tons or under)</i> In no small craft skill, can use pilot skill/2.	Coordination
soc (sociology)	<i>The study of societies and cultures</i>	IQ
smith [smithing]	<i>The ability to shape metal using heat and hammering</i>	Strength
snare [snares]	<i>The ability to create, set, and disable traps</i>	Coordination

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
sneak [sneaking]	<i>The ability to move quietly and unseen</i>	Agility
stash (stash)	<i>The ability to hide things in nooks and crannies or in plain sight</i>	IQ
steer [steering]	<i>The ability to direct large vehicles in the direction desired.</i>	Coordination
strat (strategy)	<i>The dispose forces and plan longrange</i>	IQ
stun (stun)	<i>The ability to stun creatures psionically Stunned 5 minutes per level of skill.</i>	Strength
stwse (streetwise)	<i>The ability to find connections, rumors, and general urban survival</i>	Charisma
surg (surgery)by operating	<i>The ability to cure wounds and other physical ailments</i>	Coordination
surv [survival]	<i>The ability to live off the land</i>	Endurance
swim [swimming]	<i>The ability to swim</i>	Agility
tan [tanning]	<i>The ability to make leather from raw skins</i>	IQ
taste [taste]	<i>The ability to discern quality</i>	Charisma
TK (telekinesis)	<i>The ability to move objects psionically. At level +1.may move 10 grams 10 meters. Mass and distance X10 per level thereafter. Speed of movement is 5 KPH per level of TK max.</i>	Strength
tact (tactics)	<i>The ability to use personnel and resources on hand to best effect.</i>	IQ
train [training]	<i>The ability to train animals to dotricks</i>	Charisma
treat (treatment)	<i>The ability to cure diseases and wounds without surgery</i>	IQ
trk [tracking]	<i>The ability to follow a creature or object by noticing signs of its passage</i>	Agility

STARCLUSTER - SKILLS AND METASKILLS

Skill	Description	Governing Attribute
unarmed (unarmed)	<i>The ability to fight without weapons</i> Dam = +5 per 2 points of str, coor, and/or agy above 7 and +5 per level of unarmed.	Strength
wea [weather]	<i>The ability to predict weather patterns</i>	IQ
weav [weaving]	<i>The ability to create cloth from fibers</i>	Coordination
writ (writing)	<i>The ability to express oneself in written words</i>	Charisma
zero-G (zero-G movement)	<i>The ability to perform difficult physical acts and maneuver in zero gravity.</i>	Agility



STARCLUSTER - SKILLS AND METASKILLS

Metaskills

Metaskills are skills which can modify other skills. In StarCluster, the metaskills are typically gained as a choice in a profession or schooling instead of rolling for a normal skill on the job related skill tables. The player can *always* opt for the associated metaskill rather than using the skill tables. Metaskills are always named as a verb rather than a noun, to show that they are intended to be used to do something. The GM is the final judge of whether a particular combination of metaskill and object are appropriate.

The following nebulous definitions are given to allow the GM something to base decisions on. The wording has been left as vague as possible to give the GM the widest possible latitude in interpreting it. Remember, how the characters interpret these definitions never means anything. The important thing is how the GM interprets them.

Design

To create new, functional plans for making things.
modifier = base chance * .5, round up.

Repair

To fix things which are broken.
modifier = base chance * 1.

Build

To make things out of existing components to plans.
modifier = base chance * 1.

Create

To think up novel ideas.
modifier = base chance * .5, round up.

Obtain

To get what is wanted, whatever the means.
modifier = base chance * .5, round up. Additional modifier COOR.

Embellish

To make a thing prettier.
modifier = base chance * 1. Additional modifier COOR.

Appear

To seem to be something different.
modifier = base chance * .5, round up.

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Analyze

To figure out processes, components, or functions.
modifier = base chance * .75, round up.

Grow

To make something prosper and increase in value.
modifier = base chance * 1.

Focus

To shut out all distractions and concentrate effort.
modifier = base chance * 1.

Discipline

To obey orders without question, whether your own or others.
modifier = base chance * .5, round up.

Relate

To link things together in meaningful ways.
modifier = base chance * 1.

Sell

To make people want something you have.
modifier = base chance * .5, round up. Additional modifier CHAR.

Converse

To entertain others by speaking.
modifier = base chance * 1. Additional modifier CHAR.

Organize

To make things work together more efficiently.
modifier = base chance * .75, round up.

Protect

To prevent harm to things under your care.
modifier = base chance * .5, round up.

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Extract

To remove something from a matrix.
modifier = base chance * 1.

Observe

To watch and learn.
modifier = base chance * 1.

Orient 3D

To know where you are in relation to other things in 3D space.
modifier = base chance * 1.

USING METASKILLS

Metaskills are used in two ways, listed below:

Case 1

A metaskill may be used to modify other skills. The first plus of the metaskill indicated that the modification can be done. Each subsequent plus of metaskill is used as a plus of the modified skill. This base chance is then modified by the listed modifier.

Example: design+2 construction+3 a spaceship. This allows the character to design a spaceship, because *design* modifies *construction*, which allows the character to build structures. The chance of success is based on construction, which gives a base chance of 65%, plus 5% per plus over +1. The design skill is at skill level +2, so the first plus allows the design, and the second is added to the modified skill. The construction skill is at +3, which gives a total chance of 65% (for const+1) + 5% (for const+2) + 5% (for const+3) + 5% (for design+2), for a total of 85%. This chance is then modified by multiplying by the modifier of .5, for an adjusted chance of 42.5%, rounded up to 43%. Success means that the *plans* are successfully designed, not that the spaceship is actually constructed to those plans!

Case 2

A Metaskill may be used to modify objects directly. In this case, the base chance is 20% at skill level+1, plus 5% per level of skill above +1.

Example: Sell+2 ice to Eskimos. Base chance is 20% (sell+1) + 5% (sell+2), for a total of 25%. This is multiplied by the modifier for sell, *.5, to become a chance of 12.5%, rounded up to 13%.

Remember: The GM is always in control, and should assess any penalties or benefits he wants to assess, and interprets these descriptions as he sees fit.

STARCLUSTER - SKILLS AND METASKILLS

BOOK OF JALAN PSIONICS SKILLS (MAGIC)

Skill	Name	Description	Parameters
anim	Animate	The ability to make inanimate objects move with the semblance of life.	A: DETAIL B: NUMBER C: SPACE
add	Add	The ability to add skills into an existing skill weave If the added skill fails, the weave collapses.	A: NUMBER
adh	Adhere	The ability to change the adhesive quality of an object or location	A: AREA B: SPACE C: MASS
app	Apportation	The ability to move things from one place to another instantaneously	A: SPACE B: MASS
att	Attract	The ability to attract/repel an object or creature from an area, object, or creature	A: AREA B: DETAIL
aug	Augment	The ability to change the amount of life force (Const.) within a creature	A: DAMAGE
barr	Barrier	The ability to prevent movement across a planar area	A: AREA
boost	Boost	The ability to cause physical characteristics to change temporarily	A: DAMAGE B: NUMBER
cmd	Command	The ability to control the souls of the dead or spirits	A: DETAIL
comm	Communicate	The ability to communicate over long distances	A: SPACE B: DETAIL
conn	Connect	The ability to connect directly to a deity	A: DETAIL B: NUMBER

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disc	Discover	The ability to find out what magic is currently operating	A: AREA
dur	Durance	The ability to resist change over time	A: TIME
emo	Emotion	The ability to control emotions	A: SHIFT
enh	Enhancement	The ability to make sensory input sharper or duller	A: NUMBER
engy	Energy	The ability to control energy	A: AREA B: DAMAGE
free	Free	The ability to banish all existing magic	A: AREA
geas	Geas	The ability to compel creatures to perform tasks:	A: DETAIL B: NUMBER
inf	Infusion	The ability to transfer a quality from one object to another	A: DETAIL
interr	Interrogate	The ability to get usable information from another's mind	A: WORDS
join	Join	The ability to cause creatures, objects and/or locations to become linked in sympathy	A: AREA B: DETAIL C: SPACE
link	Link	The ability to join the abilities of magic users together	A: NUMBER
loc	Locate	The ability to find an object or person	A: DETAIL B: AREA
matt	Matter	The ability to create temporary magical matter	A: DETAIL B: MASS
mem	Memory	The ability to control memories	A: DETAIL
proxy	Proxy	The ability to use a substitute to represent the thing	A: DETAIL
resist	Resist	The ability to change the resistance of an object (constitution) to applied energy	A: POWER B: DAMAGE
rppt	Rapport	The ability to become one with another's mind	A: SPACE
script	Script	The ability to cause magic effects to follow a programmed sequence	A: DETAIL

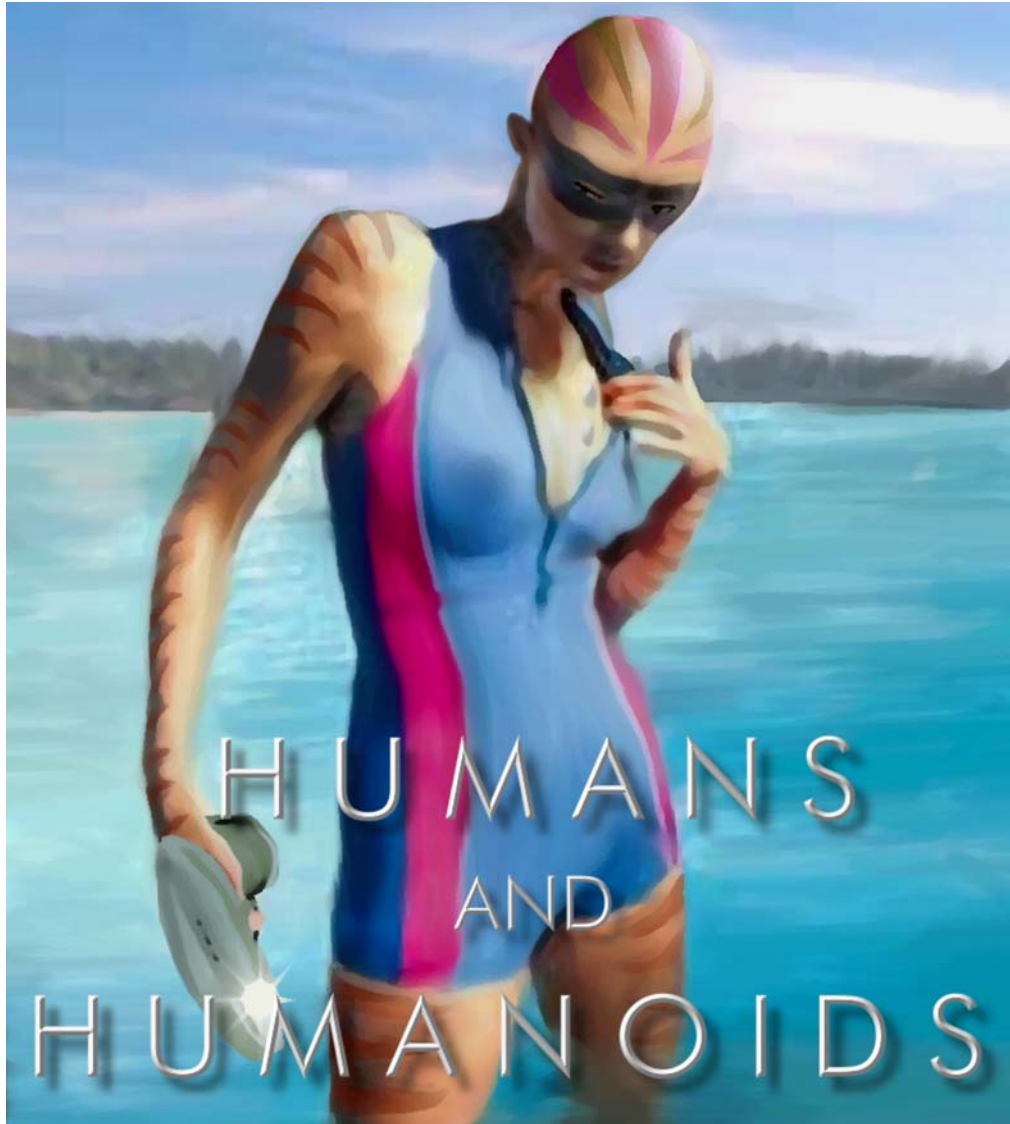
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seem	Seeming	The ability to change outward appearances	A: DETAIL
shape	Shape	The ability to change the shape of something	A: DETAIL
shield	Shield	The ability to resist Psionic or Physical attack	A: QUALITY
sit	Sight	The ability to see far away in space or time	A: TIME B: SPACE C: DETAIL
susp	Suspend	The ability to temporarily suspend the execution of a spell	A: TIME
trans	Transfer	The ability to transfer life force (Constitution) between two creatures	A: DAMAGE
trig	Trigger	The ability to set a condition for operation of magic	A: DETAIL B: AREA
TK	Telekinesis	The ability to move objects with just the mind	A: MASS B: SPACE C: SPEED

STARCLUSTER - SKILLS AND METASKILLS

PSI SKILL PARAMETERS

Parameter	Description
AREA	3 sq. ft., @ +0, 10 sq. ft. @ +1, 20 sq. ft. @ +2, etc.
DAMAGE	50 points of constitution per plus
DETAIL	sketchy @ +0, fuzzy @ +1, fairly detailed @ +2, quite detailed @ +3, realistic @ +4, hyper-real @ +5
MASS	1 ounce@+1, 1pound@+2, 10 pounds@+3, 50 pounds@+4, 200 pounds@+5, 1000 pounds@+6, 5000 pounds@+7, 25000 pounds@+8, poundsX5 per plus thereafter
NUMBER	Number is 1 plus (plus), i.e. 2@+1, 3@+2, 4@+3, etc.
QUALITY	Quality of armor increases.5 per plus, magic resistance increases as 10% per plus
SHIFT	Move one clockwise or counterclockwise on the chart below, starting with present emotion <div style="text-align: center;"> <p>LOVE</p> <p>PANIC AFFECTION</p> <p>FEAR INDIFFERENCE</p> <p>RAGE DISLIKE</p> <p>HATE</p> </div>
SPACE	Self@+0, 1 mile@+1, 10 miles @ +2, 100 miles @ +3, 100 miles@+4, etc.
SPEED	2.5 mph@+0, 5 mph@+1, 10 mph@ +2, 20 mph@ +3, 30 miles@+4, etc.
TIME	1 day@+0, 1 week@+1, 1 month@+2, 1 year@+3, 10 years@+4, 100years@+5, etc.
WORDS	3 relevant words per plus, i.e. 3 @+1, 6@+2, 9@+3, etc.



STARCLUSTER

HUMANS AND HUMANOIDS

BY CLASH BOWLEY

STARCLUSTER

HUMANS AND HUMANOIDS

Humans and Humanoids have become over the last 500 years the dominant life form in the Cluster. About 1 million years ago, according to the best estimates, an alien race known as the "seeders" brought plants, animals, and people from Old Earth into the Cluster. They deposited these cargoes at four different places in the Cluster. Jalan in the Anson System, Tamana in the Brass System, Adma in the Iris System, and Faren in the Plush System. They followed a similar pattern in each case, destroying about half the existing ecosystem and replacing it wholesale with the imported Old Earth ecosystem. The technology used must have been phenomenal, and the reason behind it inscrutable. In any case, the people deposited, a species known as Homo Erectus, evolved separately in 4 different places.

Jalan, Anson 2

On Jalan, the original Homo Erectus stock evolved in several different ways, but at least one variety of humanoid which evolved there is virtually indistinguishable from Diasporan Humanity. The peoples of Jalan did not evolve in a technological manner, instead developing amazing psionic powers far beyond normal human abilities. As all information on Jalan, as well as contact with the planet, is under SaVaHuTa interdict, and as the humanoids of Jalan have had very little impact on the rest of the Cluster, we will move on to more important matters. For more information, I refer you to the Book of Jalan.

Tamana, Brass 2

On Tamana, under the smouldering red sun of Brass, Homo Erectus was at first almost wiped out. The large and aggressive plains carnivores of Tamana were ruthless in harrying the people. The bands of humans retreated into the rain forests, where they lived in the mid-canopy region. As Tamana is cooler than Earth, they evolved more hair as a covering. Their eyes became more receptive to dim light. Their feet evolved into efficient climbing gear with long grasping toes and an opposable thumb. Most remarkably, they evolved a long prehensile tail like some of the monkeys of Old Earth. Thus equipped, they came to dominate the forest and move out onto the plains.

Sastra was their name for themselves. It meant "The People". They were small, slightly built, and incredibly agile. They were also smart. They invented tools, first from wood and flint, then from bronze and iron, then from steel. Eventually, they created a thriving technologically driven society. It was then that they were invaded from space.

The creatures called themselves "Humans", and looked not too dissimilar from Sastra, but they were strange. They were fleeing the imminent death of their home star and the immediate area of space around it by shooting their people off in sub-light colony ships. They came to the Cluster because of the astonishing concentration of habitable worlds here, and this was to be their new world.

There was a long and bitter war fought there on Tamana, but before it ended, the Sastra and Humans discovered that they were very closely related to and could interbreed with humans. The war cooled down and the two sides decided they could get along after all.

Adma, Iris 4

Adma is a beautiful world. The largest continent lies in the northern hemisphere, and is very well watered, full of lakes and large rivers. This was the continent the Seeders placed their Homo Erectus colony on. The hominids, however, did not fare well with the dangerous native carnivores and the radiation Iris pumped out, and they retreated to the lakes. They grew adapted to their semi-aquatic home, growing a dense pelt of fur to ward off the cold winters, and becoming much larger than they used to be, increasing their volume to surface area ratio. They also grew webbed fingers and toes, with the long toe web able to flip up against the humanoid's shins for easier walking on land, which they did frequently. They avoided the bright sunlight, becoming nocturnal creatures. Their eyes grew much larger and more sensitive to light. Their nostrils became flat and sealable, and their external ears migrated to the tops of their head, the better to hear while most of the body was under water.

They called themselves the "Tagris" which means "we". Their lake dwellings became more and more elaborate until they became cities. Aquaculture replaced agriculture, and fish were ranched and water vegetables were raised. They began building their own lakes by damming the rivers, building their cities and dams in stone. They began refining metals for stone cutting, and learned how to treat steel so that water did not corrode it.

Adma has two moons, both quite large. They perform a marvelous dance in the sky, and the tides are tricky and wild. The Tagris wanted to visit those other worlds they could see so easily in the sky. They could see the lakes and rivers on the moons and wanted to colonize them. The Tagris put together a concerted effort, and finally sent a small ship to the nearest moon, Flan. When they got there, they found that Flan was inhabited by creatures called Humans, but lately come to Flan, fleeing some disaster on their homeworld.

The two peoples shared technologies and planets, with many Humans coming down to Adma to live with the Tagris, but most of the Humans feared the Tagris, and would not allow them on Flan. There is a bit of Xenophobia in Humanity, and Flan was just the first of many to choose a solitary way.

Faren, Plush 3

Faren is a water world, with only scattered tiny islands breaking up a sea that stretches from pole to pole. The original Homo Erectus set down by the Seeders soon stretched the food supply on the islands to the breaking point. Some of the H. Erectus colonizers began actually living in the shallow lagoons. It was a blessed respite. The intense amount of radiation pumped into Faren by Plush was mitigated by the water, and the water supplied plenty of food. The H. Erectus soon became very different from their forbearers. They lost their hair and grew a layer of subcutaneous fat. Their ears were tiny, and their nostrils could shut tight against the water. Their feet grew longer and flatter, and they grew a wide, muscular, diamond shaped tail. They could propel themselves through the water very quickly with the tail, using their paddle-like feet to steer. Their skins became patterned with wild colors for camouflage and for identification, as each person's pattern was individual.

Their hands were left free by this mode of travel, and they took to carrying stingray spines and coral spires as tools and weapons. They learned to make plastics from seaweed, using fires on the islands to cure and shape it. They built bubble cities underwater, and factories on the islands, and brought the whole planet under their sway, lit with electricity powered by the tides. The tides of Faren are enormous, as Faren is a "Double Planet", with a moon nearly as big as Faren is. From this moon one day came visitors. Humans fleeing from Old Earth had colonized the moon and been intrigued by the lights in the ocean, and had gone down to meet with these "Aliens". The Humans and the people of Faren, known to themselves as the "Vantor" - which translates to "us", soon became partners in colonizing. The Humans building artificial floating islands for the face of Faren,

and the Vantor settling the seas of the moon, known at the time as "Plush", but since renamed "Committed-to-the-Lord".

The Vantor and Human cooperation extended further, and it was discovered that they were virtually indistinguishable via DNA testing, and could probably create viable offspring. This was shown to be the case, and the two people became one.

The Diaspora

Humans left Old Earth in thousands of sublight generational ships, slowly leaving the vicinity of the original homeworld. They left over a period of about one hundred years, the later ships arriving first because they were faster. There has been a colony ship reported within the last decade, though it proved dead, and there may be others on their way. They were not aimed just at the Cluster, Humans scattered all over the galaxy, but the Cluster was the target for many.

Sometimes there were troubles along the way. Several colony ships arrived dead, and several more were damaged. On many ships, the humans, with no hand in guiding the pre-programmed ships, lacked purpose and slid into savagery. On others, people were able to retain their focus and survived the trip relatively intact. At any rate, several tens of millions of humans survived the trip and entered the Cluster.

This event, this tide of Humanity, is called **the Diaspora**, which means the Scattering. The influx of these peoples occurred over a long time period, with the densest time of arrivals some 300 to 400 years ago. As each colony ship - or sometimes a matched pair - was generally filled with people with something in common, the various worlds they settled became little islands in the sea of space, and the Diasporan communities they harbored became isolated populations. Each world became a totality, and the small genetic differences became exaggerated.

The worlds of course warped them also. The programming of the robot brains was seemingly imperfect, witness the selection of asteroid moons over lush earth-like planets, as happened several times. The robots were equipped to deal with settling asteroids, however, and they were settled. Many Diasporan communities descended into barbarism and savagery, either at this point or on the trip, and had to figure out a way to live in these strange circumstances. This was the way things were when the speed of light limited all interplanetary travel, and banished interstellar traffic altogether.

Transluminal Speeds

In the year 158 from founding - our year -211 - the skies of Loop (Loop 3+3) were split by 3 strange ships, of a technology beyond the comprehension of the inhabitants of Loop. The ships flew over the main city in broad daylight, and drew on past the town. 2 ships settled to the grass of a meadow while the third hovered above seemingly without effort. As the Loopers watched, one of the landed craft opened its hatch and a small alien stepped out. It was a Kertu-Drua, by the name of Keta Kakti. Somehow the inhabitants of Loop restrained themselves for killing this warty freak where he stood, and thus ensured their fortune.

What they did not know was that Keta Kakti was offering them Jump Drive technology for trade. They couldn't understand it because his Universal Translator didn't have any Diasporan Languages in it, as they were the first Diasporans the Kertu-Drua had ever met.

The Kertu-Drua had gotten the Jump Drive from the Etvar, who had dug it up while examining some interesting ancient Etvar artifacts. The Kertu-Drua had just used it to found a colony on Loop's primary, Kertu-

Daturak, Loop 3. They noticed the traces of someone living on the 3rd orbit moon, and had come to investigate and trade.

Loop eventually bought the Jump drive for 3 years output from their porcelain factories and the translator rights to their language. They cranked up production and in less than a decade had a functional prototype unit. From then on, things began to snowball. The Kertu-Drua had not stopped with selling the design to Loop, but Loop was the first, and the first to get into production. Within twenty-five years, the jump routes throughout most of Sector Second had been traced, and a transluminal trade had started up.

SaVaHuTa and the Diasporan Community

In the year -1 of the present count, a conference was held on the planet Glorianna, Gloria 4. Representatives from many worlds were present for the purpose of negotiating a League of Humanity which would encompass all Human settled worlds in the Cluster. The conference turned bitter and acrimonious when representatives from Tamana, Adma, and Faren attempted to be seated. Many of the representatives were happy to have them join, but others refused to accept them as Human, calling them aliens and worse.

The conference eventually split, producing two separate leagues, one which included representatives of the Sastra, Vantor, and Tagris as well as Humans, and one which did not. The League of Sastra, Vantor, Humans and Tagris - commonly referred to as SaVaHuTa - was the first of the leagues formed. The other was the Diasporan Community. The two leagues agreed to mutual respect and trade, protocols for which were drawn up. Both had similar structures which were simple and worked. Representation was by State, Colonizer, and Colony. States had one vote, Colonizers had one vote for themselves and one for each of their Colonies. Colonies which met certain requirements became States. All States and Colonizers donated a part of their income to League-wide interests, out of which was funded an Army and Space Navy to keep the peace. States and Colonizers could keep their own defence forces, and internal matters were the business of the worlds involved, not SaVaHuTa.

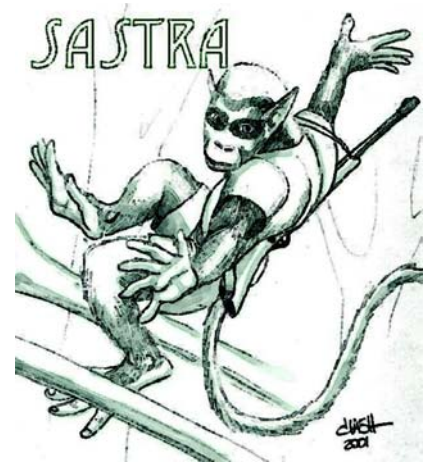
This loose association was the largest political organization in the cluster overnight. The virgin system of Leda was claimed for the capital, and the four earth-like worlds there were settled as new homeworlds for the four races of humanity. Each race elected leaders who held rotating chairmanship of the League. The burgeoning number of crossbreeds could be considered as whichever race they preferred. Sastra-Human crossbreeds became known as SaHus because of the short form of the Leagues name. Similarly, Vantor-Humans became known as VaHus, and Tagris-Humans as HuTas.

The Cluster was divided up into administrative Sectors at the natural choke points of the Jump routes. Leda System became a sector of its own, known as Sector Prime. Sector Second included Iris System and every thing beyond it, with its capital on Adma. Sector Third included Bullet System and all beyond, with its capital on Faren. Sector Fifth included Artemis system and everything beyond it, with its capital on Tamana. Sector Forth connected all the other systems together, with its capital on Glorianna. The next year, the first of the leagues, was called Year Zero, the start of a new calendar adopted by both SaVaHuTa and the Diasporan Community.

Sastras

Sastras tend to be smaller and lighter than most Humans. Their reflexes and agility are excellent, but their strength suffers from their slight stature. Sastras at age ten have a minimum Coordination and Agility score of 10, and a maximum Strength score of 8. All Sastras can climb anything, and are flexible in the extreme. They have in effect five hands, two on their arms, two larger and stronger ones on their legs, and their prehensile tail functions as a third, clumsier hand. Sastra foot hands are at -2 coordination from their true hands, and +2 strength. Sastra tails are at -4 coordination from their true hands, and at -2 strength.

Sastras have better than normal hearing, and are drawn to noises as most Humans are drawn to motion. Their ears are long and pointed. Their fur is soft and very plush, about a centimeter long all over their bodies except for their crest, which is also soft and plush, but up to 10 centimeters long and extends all the way down their back, and the soles of their feet and palms of their hands, which are bare skin. Sastra legs are short in the thigh and calf, and very long in the foot. They stand on the balls of their feet, so the total length of leg is in human proportion to their bodies. Their ankles can pivot like wrists. Sastra senses are rated thus: SightX3, HearingX2, Smell, the rest being unimportant. Sastra do see somewhat better in low levels of light than Humans, but dislike bright lights.



SaHus

SaHus can take various forms. They can inherit from either of their parents, in other words have Sastra or Human build by body part, it is a 50% chance either way. The following body parts are rolled for or chosen:

Sastra	Human
Fur and Crest	Skin and Hair
Muzzle	Nose/Mouth
Tail	No Tail
Sastra Leg	Human Leg
Sastra Foot	Human Foot
Sastra Ear	Human Ear
Sastra Senses	Human Senses

SaHus are smaller and slighter than Humans, but not so small as Sastras. They have minimum Coordination and Agility scores of 8, and a maximum Strength score of 10 at age ten. Human senses are rated thus: SightX4, Hearing, the rest being unimportant.



RANGES BY RACE

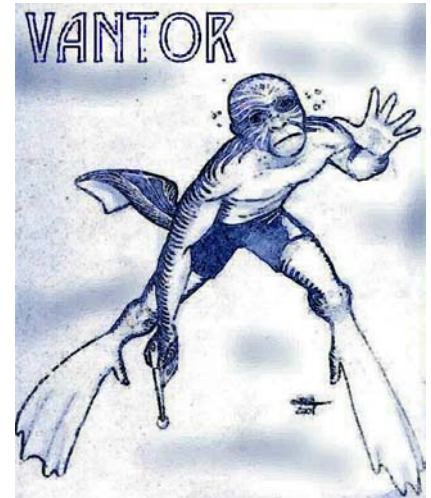
	Sastra	SaHu
Male Height	11-93	36-00
Female Height	01-45	16-86
Male Weight	16-81	26-00
Female Weight	01-70	16-91

	%d Roll	Height in meters	Weight in kilos
	01	1.40	25.00
	02-03	1.45	26.00
	04-07	1.48	27.00
	08-12	1.50	28.00
	13-18	1.53	29.00
	19-24	1.55	30.00
	25-33	1.58	31.00
	34-40	1.60	32.00
	41-47	1.63	33.00
	48-54	1.65	34.00
	55-60	1.68	35.00
	61-65	1.70	36.00
	66-69	1.73	38.00
	70-77	1.75	40.00
	75-79	1.78	42.00
	80-83	1.80	44.00
	84-87	1.83	46.00
	88-90	1.85	48.00
	91-93	1.88	50.00
	94-95	1.90	53.00
	96-97	1.93	55.00
	98-99	1.95	58.00
	00	1.98	60.00

Vantors

Vantors are superbly adapted to life in the sea. Their broad, muscular tails propel them through the water at wonderful speed. They are compact but robust in build, the smallest of the Humanoids. They are somewhat clumsy when walking because of their large finned feet. Vantors have a minimum Endurance of 10 and a maximum Coordination and Agility of 8 at age ten. They have no hair at all on their bodies and a thick layer of subcutaneous fat, and their skin is patterned with stripes, spots, and other markings in an individual pattern. A Vantor's nostrils can shut tightly against water pressure.

Vantor markings include, but are not limited to: stripes, spots, clusters, whorls, rings, dashes, and splotches. Vantor senses are rated thus: SightX3, Smell, Touch, the rest being unimportant



VaHus

VaHus, like SaHus, can be like either of their parents in certain categories. It is 50% chance either way as to whether their Vantor or Human genes predominate for each body part listed. The following body parts are rolled for or chosen:

Vantor

No Hair, Fat Layer
Tail
Vantor Feet
Sealable Nostrils
Patterned Skin
Small External Ears
Vantor Senses

Human

Hair, no Fat Layer
No Tail
Human Feet
Non-Sealable Nostrils
Non-Patterned Skin
Larger External Ears
Human Senses

VaHus have a minimum Endurance of 8, and a maximum Coordination and Agility of 10 at age 10. Human senses are rated thus: SightX4, Hearing, the rest being unimportant.



RANGES BY RACE		
	Vantor	VaHu
Male Height	21-98	46-00
Female Height	01-93	21-98
Male Weight	21-85	31-00
Female Weight	01-55	15-85

	%d Roll	Height	Weight
		in meters	in kilos
	01	1.00	20.00
	02-03	1.05	22.00
	04-07	1.10	23.00
	08-12	1.15	25.00
	13-18	1.20	27.00
	19-24	1.25	28.00
	25-33	1.30	31.00
	34-40	1.33	32.00
	41-47	1.38	33.00
	48-54	1.40	34.00
	55-60	1.43	35.00
	61-65	1.48	36.00
	66-69	1.50	38.00
	70-77	1.53	40.00
	75-79	1.58	42.00
	80-83	1.60	43.00
	84-87	1.63	44.00
	88-90	1.68	45.00
	91-93	1.70	46.00
	94-95	1.75	47.00
	96-97	1.80	48.00
	98-99	1.83	49.00
	00	1.85	50.00

Tagris

Tagris very large and strong, but usually have a somewhat lower endurance, as their large bodies burn off energy faster than Humans. Tagris have webbed toes which flip up for ease of walking on land. Their hands are also webbed, but only half way up the fingers. Their shoulder muscles attach to the sides of their heads for additional arm power, so they cannot turn their heads well, but they are supple and can turn their upper bodies around easily. Their eyes are large and adapted for night vision, and their ears are located at the top of their head. They are furred all over except for their lower face, chest and belly, and hands and feet. Tagris nostrils can be sealed shut against water. Tagris have a minimum Strength score of 10 and a maximum endurance score of 8 at age 10. Tagris senses are rated thus: SightX4, Touch, the rest being unimportant.



HuTas

HuTas are smaller as a rule than Tagris, but tend to be larger than most Humans. Like SaHus and VaHus, they have a chance to inherit their body parts from either parent, 50% chance either way. The following body parts are rolled for or chosen:

Tagris	Human
Tagris Feet	Human Feet
Tagris Hands	Human Hands
Tagris Head and Shoulders	Human Head and Shoulders
Fur	Hair
Nocturnal Eyes	Diurnal Eyes
Tagris Ears	Human Ears
Sealable Nostrils	Non-Sealable Nostrils
Tagris Senses	Human Senses

HuTas are not quite as strong as Tagris, and so have a minimum Strength score of 8 and a maximum Endurance score of 10 at age ten. Human senses are rated thus: SightX4, Hearing, the rest being unimportant.



RANGES BY RACE		
	Tagris	HuTa
Male Height	16-00	11-50
Female Height	11-50	01-25
Male Weight	21-00	11-40
Female Weight	11-30	01-25

	%d Roll	Height	Weight
		in meters	in kilos
	01	2.00	75.00
	02-03	2.05	80.00
	04-07	2.10	85.00
	08-12	2.15	90.00
	13-18	2.20	95.00
	19-24	2.25	100.00
	25-33	2.30	105.00
	34-40	2.33	110.00
	41-47	2.38	115.00
	48-54	2.40	120.00
	55-60	2.43	123.00
	61-65	2.48	128.00
	66-69	2.50	130.00
	70-77	2.55	135.00
	75-79	2.60	140.00
	80-83	2.65	145.00
	84-87	2.70	150.00
	88-90	2.75	155.00
	91-93	2.80	160.00
	94-95	2.85	165.00
	96-97	2.90	170.00
	98-99	2.95	175.00
	00	3.00	180.00

STARCLUSTER - EQUIPMENT: PERSONAL



STARCLUSTER EQUIPMENT: PERSONAL

BY ALBERT BAILEY
AND
CLASH BOWLEY

STARCLUSTER - EQUIPMENT: PERSONAL

MATERIALS

Filament-reinforced ceramic is the main structural material at **Tech Level 8**. Typically, it has the strength of steel at about 25% of the weight, typical specific gravity being around 2. Complex shapes can be created using the material as it is moldable until cured, when it becomes hard and rigid. Filament-reinforced ceramic is opaque, but Un-reinforced transparent ceramic is also available, though the tensile strength is lower.

The main structural material at **Tech Level 9** is plasteel. It has around 10 times the strength of ceramic at twice the density (specific gravity approximately 4). Plasteel is a viscous liquid until radiation-frozen, when it becomes diamond-hard. Plasteel is naturally transparent, but can be doped to be an opaque substance of any color. Both ceramic and plasteel can be produced in micro-honeycombed versions of arbitrarily lower density, though proportionally lower strength.

Ceramic is produced with surface layer of all different colors and textures. Plasteel is normally made only in the transparent version, inasmuch as at tech level 9, active films coatings are readily available. These films enable a plasteel object to take on any color and degree of opacity at microprocessor control. These films can even be used as holographic viewscreens.

At **Tech Level 10**, active plasteel can be produced. This material has the same structural properties as plasteel, but can change shape on command. Thus a plasteel wall does not need permanent doors: the wall can be made to create openings at will. The optical and acoustical properties of active plasteel are also programmable.

SPACESUITS

At **Tech Level 8**, spacesuits are not unlike those currently in use, but they possess volume compensators, air and water recycling, and attitude jets. Volume compensators alter the pressure as the suit volume changes, eliminating the tendency of a spacesuit to balloon out. This reduces the strenuousness of spacesuit use and allowing for full atmospheric pressure to be used in suits, eliminating the need for decompression. Air and water recycling scrubs carbon dioxide and water vapor from exhalation and distills water from urine, making it possible in an emergency to live for many days in a spacesuit without resupply. The excess carbon and hydrogen of respiration are used to produce methane for the attitude control jets.

Tech Level 9 spacesuits are similar, except that they are usually made of plasteel film, making them light and comfortable enough to be used as regular clothing, a practice common among space crews. Tech level 8 and 9 spacesuits can be donned quickly, in less than a minute, if required.

At **Tech Level 10**, active plasteel makes possible clothing that adapts on command, becoming a garment of any shape and form desired, even a full body spacesuit. At this tech level it is usual to have one worn object (a torc, a belt) containing active plasteel which can expand over the body at command. Wearing such a device, a spacesuit can be formed around the individual in a couple of seconds, and would automatically be triggered to do so in the absence of pressure.

Spacesuits also work well as clothing on planets with extreme environments. Being insulated cooled and heated as needed and having their own air and water systems, they make it possible to function in all but the most hazardous environments. Being tough enough to resist pressure, spacesuits also naturally have some value as armor. Those frequently engaged in hostile actions generally augment this with additional layers of ceramic or plasteel armor. If the mass of armor is large, it becomes necessary to use powered armor. Such powered suits also have the advantage of allowing one to work effectively under high-gravity environments.

The table below give the weights of spacesuit equipment for the various tech levels. The total weight one must carry is both the weight of the spacesuit, and environmental unit (needed except when using an umbilical cord), and the weight of armor or powered armor, if any. Thus an individual at tech level 8 with powered armor would have 97 lbs. of equipment.

CLOTHING

Clothing in StarCluster has deliberately been left vague. There are so many different fashions on so many worlds that it is not possible to enumerate them all. There are some differences which are due to tech level. These are differences in the materials rather in their cut or grouping. At **Tech Level 8**, there are new synthetics available, with improved qualities in either wear, tactile sense, insulation, cost,

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or beauty. Any 2 of these qualities can be improved, with any one quality lessened. Thus one might make a cloth with superior durability and insulating qualities, but at the cost of it being rather drab, or perhaps a cloth of superb tactile feel and exquisite beauty with a much higher cost. These cloths are known by many different trade names on many different worlds: Damylon, Klustra, Sleek, Hypnian, Larylon, etc. They are typically a big export item to backwards worlds.

SOME EXAMPLE TECH LEVEL 8 SYNTHETIC CLOTHS

Wear	Tactile Sense	Insulation	Cost	Fabric
5	9	2	8	Lustra
8	2	9	5	Omnian
9	8	2	5	Larylon
5	8	9	2	Hyperian
2	9	8	5	Sleek
5	2	9	8	Klustra
9	8	5	2	Damylon
5	5	5	5	Natural Fabric

THE HIGHER A MATERIAL'S NUMBER, THE BETTER IT IS FOR THAT QUALITY. NATURAL FABRICS ARE GIVEN AS THE NORMS AGAINST WHICH THE NEW SYNTHETICS ARE MEASURED.

At **Tech Level 9**, fabrics can be made to be active colored. This allows clothing to be whatever the wearer desires. Complex patterns and even animations can be programmed into the cloth itself, as the user wishes. The user can also specify streaming media feed for display. This allows for true camouflage clothing, where the clothing takes on the patterns and colors of the surroundings instantly. At Tech Level 10, the active colors of TL 9 become much more sophisticated, able to project different colors and patterns at different viewers simultaneously. This allows for not just camouflage, but true optical invisibility if the wearer wishes. It also allows for selective transparency, where the transparency of various parts of the clothing can be different to different people. Along with active plasteel and mental control, TL 10 clothing can be whatever the wearer wants.

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POWER

Just as the different Tech Levels have different characteristic materials, they also have characteristic power storage. At Tech Level 6 and 7, energy is stored chemically, in batteries and fuel cells. At Tech Level 8, energy is stored in stabilized monatomic hydrogen. At Tech Level 9, energy is stored by keeping atoms in an excited state, either with inner shell electrons removed or with nuclei in non-ground states. At Tech Level 10, energy is no longer stored. A matter/antimatter reaction is bottled in a variable temporal stasis field, called a stasis bottle. When energy is needed, it is generated on the spot by changing the time dilation factor of the stasis field temporarily, allowing some energy to leak out to the power leads.

The various energy storage/containment devices referred to throughout StarCluster are keyed by a number denoting the type of energy storage used, such as battery1, or armpak1. A 1 denotes Tech Level 7 (chemical) storage, while a 2 refers to TL8, 3 to TL9, and 4 to TL10. Armpaks are typically worn strapped to the upper arm, but can be fastened anywhere else if that would be more convenient. Costs for power storage devices may be found in the Equipment: Weapons Guide. A higher level energy storage device can replace any lower level device. It is not necessary to carry several different energy storage devices for powering different items if the energy storage unit worn is capable of powering the device with the highest energy drain.

ELECTRONICS

Mass	Item	Description	Cost	TL
5 kg	Belt Radio	A small surface to orbit radio	10cr	7
5 kg	Trivox	3D game/entertainment system	50cr	8
2 kg	Trivox Camera	Instrument for recording Trivox data	75cr	8
0.5 kg	Personal Trivox	Handheld Trivox	200cr	9
0.2 kg	Flat Camera	Instrument for recording 2D still data	20cr	5
0.2 kg	Audio Recorder	Instrument for recording audio information	5cr	6
0.1 kg	Homer/peeper	Personal locator	5cr	7
0.5 kg	Slate	Personal data display/storage device	20cr	8
5 kg	Icomm	Interplanetary MASER communicator	35cr	8
0.2 kg	UT	Universal Translator	N/C	8
Software Paks for UT				
	Baspak	Covers all SaVaHuTa languages and dialects	N/C*	8
	Diaspak	Covers all Diasporan Community languages and dialects	150cr*	8
	(Alien)pak	Covers all languages and dialects of one alien species (i.e. Guarupak, Tomupak, etc.)	1000cr	8

* CHARACTERS FROM SAVHUTA GET THE BASPAK FOR FREE AND THE DIASPAK FOR 150CR. CHARACTERS FROM THE DIASPORAN COMMUNITY GET THE DIASPAK FOR FREE AND THE BASPAK FOR 150CR. INDEPENDENT AND THIEVES WORLD CHARACTERS HAVE TO PAY FOR EITHER.

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KITS

Skill Limit	Kit	Kit Description
+4	Engineering Kit	Increases drives skill +1 per 100cr spent
+4	Disguise Kit	Increases disguise skill +1 per 100cr spent
+5	Repair Kit	Increases mech skill +1 per 50cr spent
+4	Med Kit	Increases treat skill +1 per 300cr spent
+4	Scan Kit	Increases diagnosis skill +1 per 300cr spent
+4	Surgical Kit	Increases surgery skill +1 per 400cr spent
+4	Bio Kit	Increases biology skill +1 per 150cr spent
+4	Pharma Kit	Increases drug skill +1 per 100cr spent
+4	Chem Kit	Increases chemistry skill +1 per 150cr spent
+4	Min Kit	Increases mineralogy skill +1 per 200cr spent
+5	Astro Kit	Increases astronomy skill +1 per 300cr spent
+5	Elec Kit	Increases electronics skill +1 per 100cr spent

YOU MUST HAVE AT LEAST SKILL LEVEL 1 TO USE A KIT - I.E. YOU NEED AT LEAST BIOLOGY 1 TO USE THE BIO KIT.

STARCLUSTER - EQUIPMENT: PERSONAL

CLOTHING, ARMOR AND SPACESUITS

Mass by Tech Level	Spacesuit	Environmental Unit	Armor	Powered Armor
Tech Level 7	22.5 kg	34 kg	N/A	N/A
Tech Level 8	5.5 kg	11.5 kg	ceramic 9 kg	ceramic 27 kg
Tech Level 9	1.5 kg	4 kg	plasteel 4.5 kg	plasteel 13.5 kg
Tech Level 10	1 kg	1.5 kg	active 4.5 kg	plasteel 11.5 kg

Mass	Item	Description	Cost	TL
1 kg	Clothing	Normal street clothing typical of the place purchased	1cr	1
1 kg	Expensive Clothing	Increases CHAR by 1 per 100cr spent	varies	1
2 kg	Cold Weather Gear	Clothing designed to keep one warm on cold worlds	15cr	7
1 kg	Dry Suit	Keeps one dry even after prolonged immersion	15cr	8
2 kg	Desert Suit	Water retention and recycling suit. Cuts evaporation by 95%	20cr	9
2 kg	Flak Jacket	Ballistic armor worn over clothing	25cr	6
1.5 kg	Bulletproof	Ballistic armor worn under clothing	45cr	6
3 kg	Steel Mesh	Steel mesh armor worn over clothing	45cr	7
varies	Ceramic	Fiber reinforced ceramic armor	110cr	8
varies	Powered Ceramic	Powered ceramic armor adds 10 to strength	260cr	8
varies	Plasteel	Form fitted plasteel armor	210cr	9
varies	Powered Plasteel	Powered plasteel armor adds 10 to strength	410cr	9
varies	Active Plasteel	Morphing flexible plasteel armor	365cr	10
varies	Chromskin	Skin tight reflective film armor worn under clothing	70cr	8
varies	Vac Suit	Spacesuit plus Environmental Unit	50cr	7
N/A	Vacattach	Operation required to mate a Vac Suit with Plasteel, Powered Plasteel, Ceramic, or Powered Ceramic armors	55cr	8

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PROVISIONS AND SHELTER

Mass	Item	Description	Cost	TL
5 kg	Inflatashelt	Inflatable airtight shelter for 2 people	25cr	8
10 kg	Portashelt	Airtight morphing Plasteel structure for 2 people	100cr	10
1 kg	Personal Tent	Non-airtight fabric shelter for one	10cr	7
3 kg/ person	Large Tent	Non-airtight fabric shelter	5cr/ person	1
4 kg/ person	Hard Tent	Non-airtight morphing plasteel structure	15cr/ person	10
	Self Cooked Meal	Meal prepared and cooked by yourself or a friend	0.2cr	1
	Fast Food meal	Junk food - 1 endurance per week	0.5cr	6
	Restaurant Meal	Meal cooked by a professional	2cr	3
1 kg/ meal	Heatercan Rations	Self-heating full-nutrition portable meals	1cr/ meal	7
0.5 kg/ meal	Cold Survival Rations	Essential nutrition lightweight non-degrading meals -1 endurance per week	2cr/ meal	7

STARCLUSTER - EQUIPMENT: PERSONAL

MISCELLANEOUS ITEMS

Mass	Item	Description	Cost	TL
4 kg	Reaction Pistol	A compressed gas gun designed to allow maneuvering in weightless conditions	50cr	7
4 kg	Reaction Jets	A set of compressed gas jets built into a spacesuit which allow maneuvering in zero-g. For fitting on vac suits or armor	75cr	8
varies	Plastique	A shapable explosive which can only be detonated electrically	50cr/kg	7
10 kg	Parachute	A device which uses air resistance to slow a fall	24cr	8
2 kg	Personal Winch	A device using a 200m micro-cable and a revolving drum to haul up to 1 ton	35cr	8
20 kg	Life Raft	An emergency 6-passenger inflatable raft	10cr	6
4 kg	Gills	Back mounted device to extract breathable oxygen from water	20cr	8
5 kg	MULE	A small 300 kg capacity A-Grav plate which hovers at waist height, following behind the user on a 3m cable	30cr	10
4 kg	Hoverboard	A surfboard-shaped hovering A-Grav plate with a carrying capacity of 300 kg. For sport and personal use. Steering, acceleration, and stopping are by balance	60cr	10
2 kg	Grapplewinch	100m micro-cable grapple shooter with built-in 200 kg winch	20cr	8
1 kg	Glowrod	Self-contained 24 hour light source.	1cr	8
10 kg	Lift Belt	A-Grav harness capable of lifting 200 kg to Low Orbit	50cr	10
1 kg	Filter Mask	A face mask for filtering out atmospheric contaminants	5cr	6
2.5 kg	Respirator	A device for concentrating thin atmospheres to a breathable density. Requires Armpak2 or higher for power	10cr	8
0.2 kg	Pocket Heater	A small radiant heater for quick warm-ups	5cr	7
1 kg	Laser Torch	Laser cutter/welder. Requires Armpak 1 or higher for power.	15cr	8

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MULTITOOL/POWERTOOL

Mass	Item	Description	Cost	TL
The MultiTool/PowerTool line is a handy grouping of tools in a small form factor.				
0.2 kg	MultiTool 1	Pick any 5 unpowered tools	5cr	7
0.3 kg	MultiTool 2	Pick any 8 unpowered tools	8cr	7
0.4 kg	MultiTool 3	Pick any 12 unpowered tools	11cr	7
0.6 kg	PowerTool 1	Pick any 3 unpowered and 2 powered tools	14cr	8
0.7 kg	PowerTool 2	Pick any 5 unpowered and 3 powered tools	17cr	8
0.8 kg	PowerTool 3	Pick any 8 unpowered and 4 powered tools	20cr	8

TOOL LIST FOR MULTITOOL AND POWERTOOL

Unpowered Tools	Unpowered Tools	Powered Tools
Lock Pick	Scalpel	Soldering Iron
Fish Scaler	Fork	Power Punch
Can/Bottle Opener	Plane	Trip Hammer
Razor	Wire Strippers	Power Saw
Metal Snips	Scriber	Power Fastener Driver
Punch	Scissors	Grinder
Clamp	Ratchet	Mill
Pliers	Saw	Drill
Chisel	Small Knife	
Large Knife	Fastener Driver	

STARCLUSTER - EQUIPMENT: PERSONAL

ARMOR TABLES FOR TECH LEVEL 1-4 WORLDS INCLUDING JALAN

ARMOR ITEM	EFFECT ON STATS	ARMOR POINTS	COST
TORSO COVERINGS			
Padded Vest	none	0.5	5cr
Cuir Bouli Vest	COOR -1	0.8	10cr
Jazeraint Vest	COOR -1	1.0	15cr
Hauberk	END -2	1.5	100cr
Lamellar Vest	END -1	1.7	250cr
Breastplate	AGY -1	2.0	500cr
WAIST COVERINGS			
Leather Skirt	none	0.1	5cr
Lamellar Skirt	none	0.3	50cr
Plate Skirt	Agy -1	0.4	100cr
LEG COVERINGS			
Padded Leggings	none	0.1	2cr
Leather Chaps	none	0.1	5cr
Plate Greaves	AGY -1	0.2	25cr
Jointed Plate Leggings	AGY -2	0.3	150cr

STARCLUSTER - EQUIPMENT: PERSONAL

ARMOR TABLES FOR TECH LEVEL 1-4 WORLDS INCLUDING JALAN (PART 2)

ARMOR ITEM	EFFECT ON STATS	ARMOR POINTS	COST
ARM COVERINGS			
Cuir Bouli Sleeves	none	0.1	2cr
Steel Chain Slevs	END -1	0.2	25cr
Jointed Steel Plate Sleeves	COOR -1	0.3	100cr
HAND COVERINGS			
Leather Gauntlets	none	0.1	2cr
Steel Chain Mittens	COOR -1	0.2	20cr
Steel Gauntlets	COOR -2	0.3	50cr
SHOULDER COVERINGS			
Padded Shoulder Pads	none	0.1	2cr
Lamellar Shoulder Pads	none	0.2	20cr
HEAD COVERINGS			
Leather Cap	none	0.1	3cr
Cuir Bouli Cap	none	0.2	5cr
Steel Cap	none	0.3	25cr
Steel Helm	COOR -1	0.4	50cr
Great Helm	END -1	0.5	150cr

STARCLUSTER - EQUIPMENT: PERSONAL

ARMOR TABLES FOR TECH LEVEL 1-4 WORLDS INCLUDING JALAN (PART 3)

ARMOR ITEM	EFFECT ON STATS	ARMOR POINTS	COST
SHIELDS			
Wooden Target	none	0.5	5cr
Wooden Shield	END-1 AGY -1	1.0	15cr
Steel Reinforced Shield	END -2 AGY -2	2.0	50cr
Wicker Shield	AGY -1	0.5	1cr

REINFORCEMENTS APPLIED OVERALL

Steel Scales	none	0.5	15cr
Steel Studs	none	0.2	35cr
Leather Strapping	none	0.1	5cr
Cloth Padding	AGY -1	0.1	2cr
Steel Platelets	COOR -1	0.7	75cr
Plate Ribbing	AGY +1	0.0	150cr
Spikes	COOR 1	0.2	150cr

DECORATION

Gilding	none	0.0	500cr
Painting	none	0.0	500cr
Enamelling	none	0.0	700cr
Bright Colors	none	0.0	100cr
Engraving	none	0.0	900cr
Inlay	none	0.0	900cr

STARCLUSTER - EQUIPMENT: PERSONAL

ARMOR EQUIVALENCES

Less than 2.0 = SKIN

2.0 to 2.9 = HIDE

3.0 to 3.9 = STEEL

4.0 to 4.9 = PLATE

Greater than 5.0 = MAGIC

Note: A person with a wicker shield should be treated as having wicker armor against arrows.



STARCLUSTER - EQUIPMENT: PERSONAL

CLOTHING TABLES FOR TECH LEVEL 1-4 WORLDS INCLUDING JALAN (PART 3)

PICK A STYLE OF CLOTHING, MATERIALS, WORKMANSHIP, AND ANY FINISHES WANTED. MULTIPLY BASE COSTS TIMES MODIFYING FACTOR FOR ITEM COST

ITEM	BASE PRICE	ITEM	BASE PRICE
LEG COVERINGS		OUTER COVERINGS	
Kilt/Knee length skirt	3cr	Jacket	8cr
Pants/Breeches	5cr	Coat	12cr
Hose	2cr	Overcoat	9cr
Leggings	3cr	Surcoat	2cr
Breechclout	0.2cr	Toga	10cr
Pantaloon	3cr	Mantle/Cloak	12cr
Stockings/Tabi	0.5cr	Sweater	2cr
Ankle length skirt	5cr	Poncho/Cape	1cr
TORSO COVERINGS		HEADGEAR	
Shirt/Blouse	3cr	Bandana	0.1cr
Tunic	1cr	Cap/Fez/Skullcap	1cr
Vest/Waistcoat	2cr	Broad-brimmed hat	3cr
WHOLE BODY COVERINGS		Eared cap	2cr
		Turban	3cr
		Hood	2cr
Short dress/Chiton	5cr		
Long Dress	7cr		
Robe/Kimono	8cr		

STARCLUSTER - EQUIPMENT: PERSONAL

FOOTWEAR

Slippers	2cr
Sandals	1cr
Shoes	3cr
Boots	5cr
Thongs	1cr
Clogs/Sabots	2cr
Moccasins/Soft shoes	1cr

ACCESSORIES

Belt	0.5cr
Sash/Girdle	1cr
Gloves	2cr
Mittens	1cr
Sheath	1cr
Short Scabbard	2cr
Long Scabbard	3cr

MATERIALS

COST MULTI- PLIER

Bark/Veg. Fiber/Wood	X 0.5
Wool	X 2
Soft Leather	X 1
Hard Leather	X 3
Hide - Fur Out	X 2
Fleece	X 2
Silk	X 10
Fish/Reptile Skin	X 5
Satin	X 5
Cloth of Silver	X 20
Cotton	X 1
Cloth of Gold	X 50
Suede Leather	X 1.5
Velvet	X 5
Linen	X 1

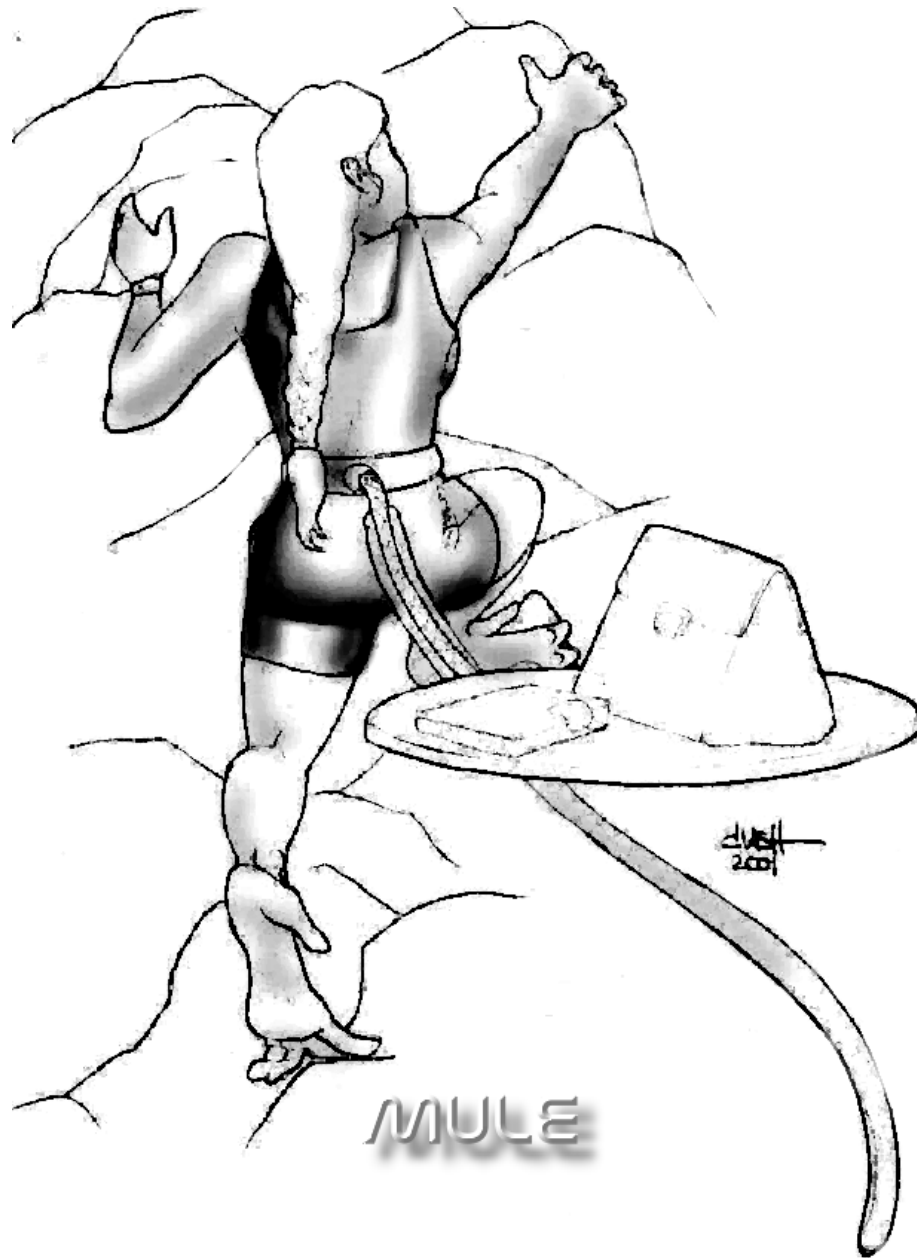
FINISHINGS

COST MULTI- PLIER

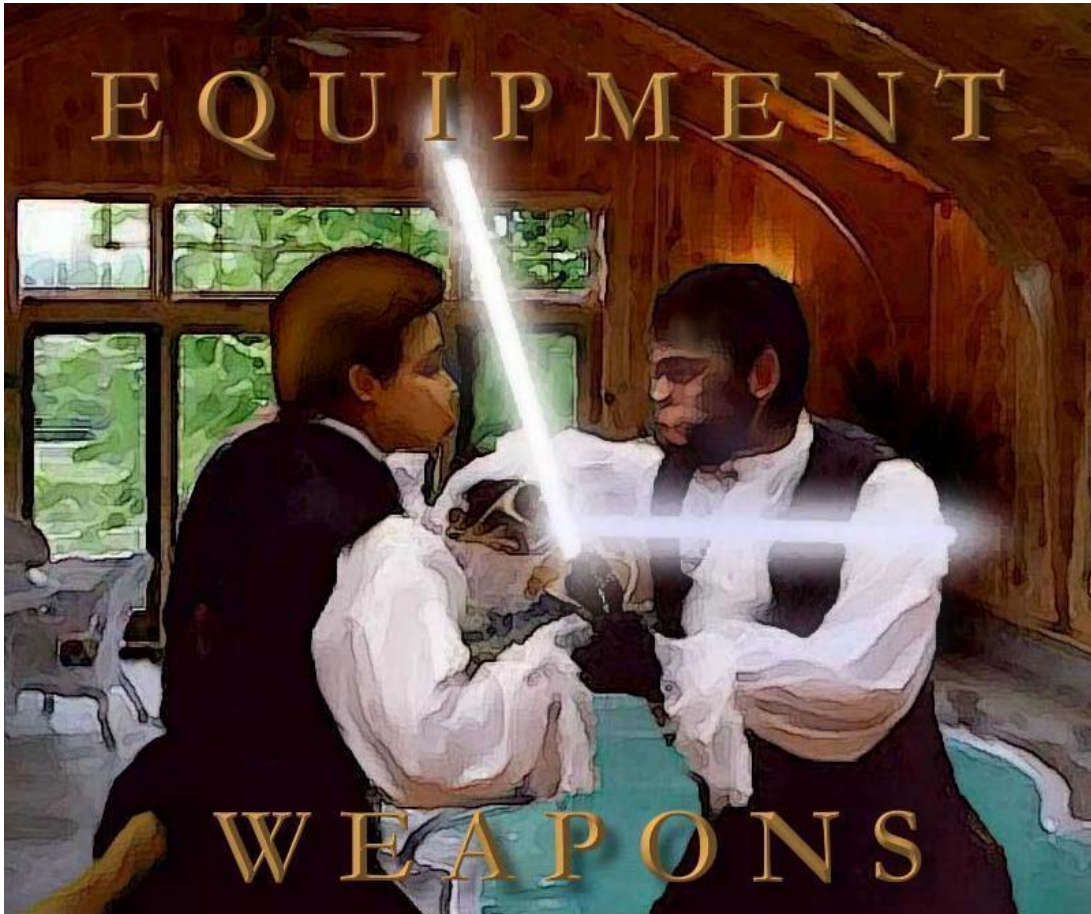
Lace trim	X 1.5
Beading	X 1.5
Embroidery	X 2
Brocade	X 2
Fur Trim	X 2.5
Fur Lining	X 4
Slashing	X 5
Piping	X 1.5
Rich Dye (Black, Purple, Blue, Red)	X 5
Simple Dye (Green, Yellow, Brown)	X 1.5
Undyed/Natural	X 1
Feathers	X 5
Rich Lining	X 3
Lining	X 1.5
Silver Buckles	X 1.5
Gold Buckles	X 2

STARCLUSTER - EQUIPMENT: PERSONAL

Workmanship		Base Metal Buckles	X 1.1
		Silver Braid	X 1.5
Slipshod	X 0.3	Gold Braid	X 2
Poor	X 0.5	Base Metal Braid	X 1.1
Good	X 1		
Excellent	X 1.5		
Superb	X 2		



STARCLUSTER - EQUIPMENT: WEAPONS



STARCLUSTER EQUIPMENT: WEAPONS

by clash bowley

STARCLUSTER - EQUIPMENT: WEAPONS



STARCLUSTER

EQUIPMENT: WEAPONS

Choosing a character's weapons is a vital item for the player. The Cluster is a dangerous place, and it is politically designed to be that way. The two main human governments, the Diasporan Community and SaVaHuTa, both hold as central the concept that the price of freedom is the willingness to accept some danger. By not interfering in local world governments, and by remaining intentionally limited, they do much to achieve that goal. The role of the leagues is to limit aggression between their members, to protect the members as a whole from outside aggression, and to further their members' common interests.

Most of the people on many worlds choose not to carry weapons, but a significant minority do. The characters in StarCluster choose to be adventurers, not accountants or lawyers, whatever jobs they have pursued in the past. This will take them into the dangerous side of life. They have both the right and the duty to protect themselves from the consequences of this choice.

The table following features a couple of columns not addressed in the Playing the Game guide. These are "Skills Required" and "Hit Table". Under the heading "Skills Required" is the skill level the character needs in order to effectively deal with that particular weapon. For some weapons, more than one skill is listed. This is because the weapon needs the character to have that combination of skills in order to be wielded properly. If one skill has a higher level requirement than the other - i.e. gun+1, beam+3 - the higher level skill is the one used "to hit". In other words, George has skills of blade +3 and beam+5, and wants to use a light sword. He has the minimum requirements to use the light sword effectively, but uses the blade skill rather than his higher beam skill for hit determination. This is because the blade skill is more important than the beam skill for this weapon.

The column headed "Hit Table" refers to the next set of tables. These adjust the character's percentage to hit based on the characteristics of the weapon, and the characteristics of the target's armor.

For instance, those weapons which do their damage via electrical discharge - such as the cattle prod - are extremely effective against conductive armors. Wicker is amazingly effective against arrows. The skill rating gives the base percentage vs. skin (no armor), and the other adjustments are made accordingly. Magic armor is only found on Jalan, and as long as that world is interdicted it will be amazingly rare outside it, but it is given here for the sake of those rare instances.

The optional weapon modifications given in the back of the book are primarily intended for primitive worlds, such as Jalan. There is, however, no reason why any weapon can't be so modified at any Tech Level if the owner wishes it. The modifications are primarily decorative in nature, but some combat effects are given. Combat effects which affect magical creatures such as are found on Jalan are unavailable on other worlds. Ironwood is an extremely dense, hard wood which can take a fair edge. It or an equivalent material is found on many worlds, and can be substituted by a dense, hard plastic if wished. Ironwood/plastic weapons are undetectable by metal scanners, and are useful at times if weapons need to be smuggled into an area or location.

STARCLUSTER - EQUIPMENT: WEAPONS

Weapons - Damage, Skills, Hit Table, Range, and Tech Level

Weapon	Damage	Skills Req	Hit Table	Range	Tech Level
Dagger	+0	blade+1	cut	short	1
Sword	+15	blade+2	cut	point blank	2
Broadsword	+25	blade+2, STR 8+	bash	point blank	3
Spear	+15	blade+1, melee+1	cut	short	1
Foil	+10	blade+4	cut point	blank	4
Shortsword	+15	blade+1	cut	point blank	2
Throwing Knife	+15	blade+2, melee+2	cut	short	3
Arc Knife	+20	blade+2	electric	short	8
Arc Sword	+30	blade+3	electric	point blank	8
Molecular Sword	+40	blade+5	cut point	blank	9
Light Sword	+50	blade+3, beam+2	energy	point blank	1
Wakizashi	+20	blade+2	cut	point blank	4
Rapier	+30	blade+4	cut	point blank	4
Two Hander	+40	blade+2, str 10+	bash point	blank	3
Katana	+50	blade+5	cut	point blank	4
Cudgel	0.00	melee+1	bash	short	0
Bolo	+20	melee+3	bash	medium	1
Whip	+15	melee+3	bash	short	1
Nunchaku	+20	melee+4	bash	point blank	1
Staff	+10	melee+1	bash	point blank	0
Singlesticks	+15	blade+1	bash	short	0
Nunchaku	0.00	melee+3	cut	short	2
Dart	0.00	melee+1	arrow	short	2
Electric Whip	+30	melee+4	electric	short	7
Cattleprod	+20	melee+1, blade+1	electric	point blank	6
Brass Knuckles	+5 to unarmed	melee+1	unarmed	point blank	4
Electric Stars	+15	melee+4	electric	short	8
Warhammer	+30	melee+4	bash	short	2
Mace	+20	melee+1	bash	point blank	2
Flail	+15	melee+3	bash	point blank	3
Axe	+30	melee+2	cut	point blank	2
Halberd	+40	melee+3, str 10+	cut	short	3
Sling Bullet	+10	melee+2	bash	medium	1
Sling Stone	0.00	melee+2	bash	medium	0
Handaxe	+15	melee+1	cut	short	1
Revolver	+15	gun+1	kinetic	medium	5
Automatic Pistol	+15	gun+1	kinetic	medium	5
Sting Pistol	drug	gun+2	sting	short	8
Volt Pistol	stun	gun+2	electric	medium	7
Flare Pistol	+40	Gun+1, gyrojet+3	kinetic	short	6
Automatic Rifle	+25	gun+2	kinetic	long	5
Sniper Rifle	+25	gun+5	kinetic	far	5

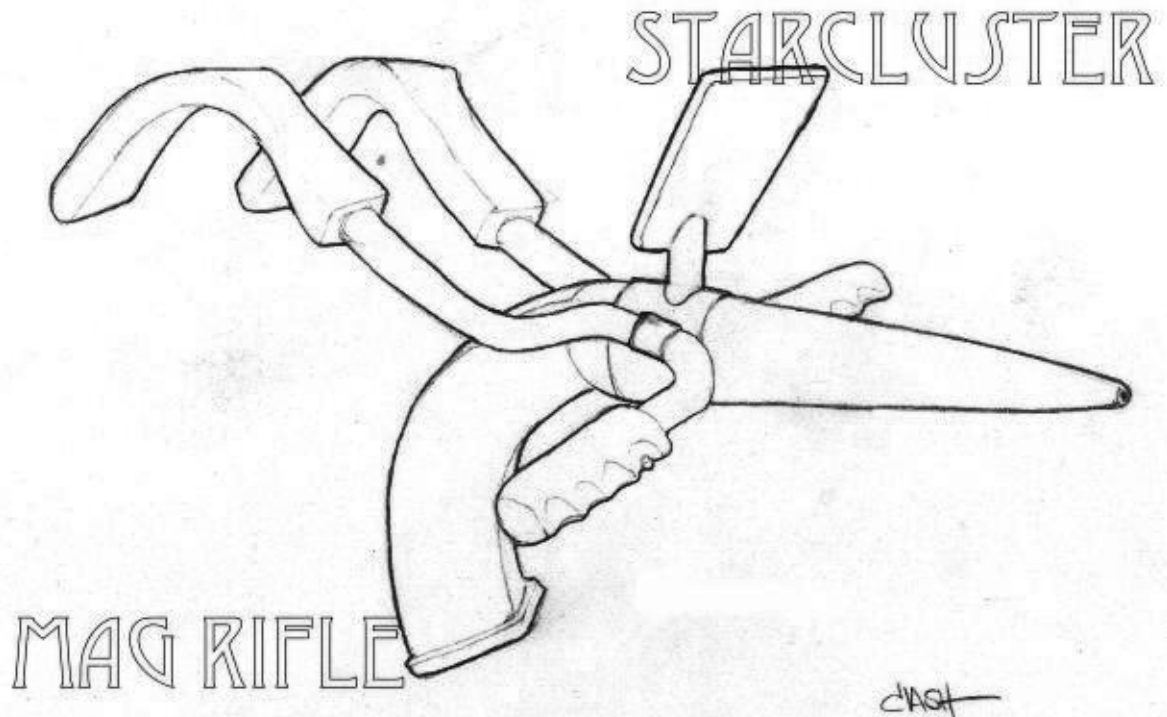
STARCLUSTER - EQUIPMENT: WEAPONS

Submachine-gun	+30	gun+1	kinetic	short	6
Flare Rifle	+40	gun+1, gyrojet+3	kinetic	medium	6
Mag Rifle	+30	gun+2, beam+2	cut	long	8
Sting Rifle	drug	gun+3	sting	medium	8
Dart Rifle	drug+15	gun+3	arrow	long	6
Laser Pistol	+15	beam+1, gun+1	energy	medium	8
Sonic Pistol	+10	gun+1	energy	short	8
Stun Pistol	stun	gun+1	energy	short	9
Hand Cogar	+40	beam+4	energy	short	10
Laser Rifle	+30	beam+3, gun+1	energy	long	8
Sonic Rifle	+20	beam+1, gun+1	energy	medium	8
Stungun	stun	beam+1, gun+1	energy	medium	9
Cogar	+50	beam+5	energy	long	10
Plasma Gun	60.00	beam+5	energy	medium	10
Gyrojet Pistol	+20	gun+1, gyrojet+1	kinetic	medium	7
Gyrojet Rifle	+30	gun+1, gyrojet+1	kinetic	long	7
Grenade Launcher	+40	gyrojet+3	kinetic	long	7
Grenade Launcher	drug fog	gyrojet+3	N/A	long	7
Grenade Launcher	smoke	gyrojet+3	N/A	long	7
Hand Cross-bow	+15	bow+1, gun+1	arrow	short	4
Short Bow	+15	bow+1	arrow	medium	1
Longbow	+40	bow+4	arrow	long	3
Recurved Bow	+25	bow+4	arrow	long	3
Light Cross-bow	+25	bow+1, gun+1	arrow	medium	3
Crossbow	+40	bow+1, gun+2	arrow	long	3
Foot Bow	+50	bow+5	arrow	far	4
Daikyu	+30	bow+4	arrow	long	3
Pellet Bow	+10	bow+1	bash	medium	2
Unarmed	(varies)	unarmed+1	unarmed	point blank	0

STARCLUSTER - EQUIPMENT: WEAPONS

Hit Tables

Cut Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-5%	-10%	-15%	-20%	-25%	-30%	-35%	0.00	-5%
Arrow Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	0.00	-5%	-10%	-15%	-20%	-25%	-40%	0.00	-45%
Bash Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-5%	-15%	-15%	-20%	-25%	-30%	-35%	0.00	-5%
Kinetic Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-5%	-15%	-15%	-15%	-25%	-30%	-35%	0.00	0.00
Energy Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	0.00	-5%	-10%	-15%	-20%	-25%	-30%	-35%	0.00
Electric Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-10%	-35%	0.00	0.00	-45%	0.00	0.00	0.00	-30%
Sting Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-10%	-25%	-55%	-80%	N/A	N/A	N/A	0.00	-10%
Unarmed Hits									
<i>Skin</i>	<i>Hide</i>	<i>Ballistic</i>	<i>Steel</i>	<i>Plate</i>	<i>Ceramic</i>	<i>Magic</i>	<i>Plasteel</i>	<i>Chrmskn</i>	<i>Wicker</i>
0.00	-5%	-10%	-15%	N/A	N/A	N/A	N/A	0.00	-5%



STARCLUSTER - EQUIPMENT: WEAPONS

Weapons - Ammunition, Ammo Costs, and Weapon Costs

Weapon	Ammunition	Ammo Price	Weapon Price
Dagger	none	N/A	1cr
Sword	none	N/A	5cr
Broadsword	none	N/A	20cr
Spear	none	N/A	2cr
Foil	none	N/A	3cr
Shortsword	none	N/A	3cr
Throwing Knife	none	N/A	10cr
Arc Knife	battery 1	1cr	10cr
Arc Sword	armpak1	2cr	20cr
Molecular Sword	none	N/A	80cr
Light Sword	armpak4	10cr	150cr
Wakizashi	none	N/A	50cr
Rapier	none	N/A	75cr
Two Hander	none	N/A	40cr
Katana	none	N/A	150cr
Cudgel	none	N/A	0.5cr
Bolo	none	N/A	5cr
Whip	none	N/A	5cr
Nunchaku	none	N/A	5cr
Staff	none	N/A	1cr
Singlesticks	none	N/A	1.5cr
Stars	none	N/A	6/5cr
Dart	none	N/A	6/5cr
Electric Whip	armpak1	4cr	15cr
Cattleprod	battery1	2cr	7cr
Brass Knuckles	none	N/A	1cr
Electric Stars	none	Disposable	10cr
Warhammer	none	N/A	20cr
Mace	none	N/A	15cr
Flail	none	N/A	10cr
Axe	none	N/A	20cr
Halberd	none	N/A	70cr
Sling	bullet	5/1cr	1cr
Sling	stone	N/A	1cr
Handaxe	none	N/A	10cr
Revolver	6 cartridges	0.1cr	2cr
Automatic Pistol	10 shot clip	1cr	5cr
Sting Pistol	25 shot clip	1cr	10cr
Volt Pistol	5 shot clip	2cr	10cr
Flare Pistol	1 flare	1cr	5cr
Automatic Rifle	20 shot clip	1cr	10cr
Sniper Rifle	1 cartridge	0.1cr	50cr
Submachinegun	30 shot clip	2cr	10cr
Flare Rifle	1 flare	1cr	10cr
Mag Rifle	60 shot clip	2cr	75cr
Sting Rifle	50 shot clip	3cr	30cr
Dart Rifle	1 dart	0.5cr	30cr
Laser Pistol	armpak2	5cr	10cr
Sonic Pistol	armpak2	5cr	10cr

STARCLUSTER - EQUIPMENT: WEAPONS

Stun Pistol	armpak3	7cr	7cr
Hand Cogar	armpak4	10cr	80cr
Laser Rifle	armpak2	5cr	20cr
Sonic Rifle	armpak2	5cr	30cr
Stungun	armpak3	7cr	20cr
Cogar	armpak4	10cr	200cr
Plasma Gun	armpak4	10cr	250cr
Gyrojet Pistol	5 shot clip	3cr	5cr
Gyrojet Rifle	10 shot clip	5cr	10cr
Grenade Launch.	HE Grenade	3cr	20cr
Grenade Launch.	Drug Grenade	4cr	20cr
Grenade Launch.	Smoke Grenade	4cr	20cr
Hand Crossbow	short bolt	6/1cr	200cr
Short Bow	arrow	6/2cr	25cr
Longbow	long arrow	6/5cr	50cr
Recurved Bow	arrow	6/2cr	200cr
Light Crossbow	bolt	6/3cr	200cr
Crossbow	bolt	6/3cr	350cr
Foot Bow	long arrow	6/5cr	400cr
Daikyu	long arrow	6/5cr	300cr
Pellet Bow	bullet	5/1cr	25cr
Pellet Bow	stone	N/A	25cr
Unarmed Combat	none	N/A	N/A



STARCLUSTER - EQUIPMENT: WEAPONS

Book of Jalan Weapon Modification Tables

Weapons on Primitive worlds like Jalan are typically ornamented as well as functional.

Materials for Blades/Heads

Item	Cost Modifier	Skill Required	Effect on combat
Steel	X1	smith	standard
Ironwood	X.8	carpentry	-15 dam
Silver	X5	smith	+15 dam v lycanthropes
			+15 dam v undead
			-15 dam v other
Iron	X1	smith	+15 dam v faye
			-5 dam v other
Obsidian	X.5	mason	-10 dam v steel+ armor
Copper	X2	smith	-5 dam v plate+ armor
Bronze	X2	smith	-5 dam v plate+ armor
Flint	X.5	mason	-15 dam v steel+ armor
Ash	X.3	carp	-20 dam

Materials for Blades/Heads

Item	Cost Modifier	Skill Required	Effect on combat
Steel	X1	smith	standard
Ironwood	X.8	carpentry	-15 dam
Silver	X5	smith	+15 dam v lycanthropes
			+15 dam v undead
			-15 dam v other
Iron	X1	smith	+15 dam v faye
			-5 dam v other
Obsidian	X.5	mason	-10 dam v steel+ armor
Copper	X2	smith	-5 dam v plate+ armor
Bronze	X2	smith	-5 dam v plate+ armor
Flint	X.5	mason	-15 dam v steel+ armor
Ash	X.3	carp	-20 dam

Blade/Head Decoration

Item	Cost Modifier	Skill Required	Effect on combat
Damascening	X1.5	smith	Swirling patterns all over metal
Etching	X3	chem	Intricate patterns burned into metal with acid
Engraving	X3	sculpt	Intricate patterns cut into material
Inlay - Mother of Pearl	X5	sculpt	Patterns cut into material and filled with Mother of Pearl
Inlay - Silver	X10	sculpt	Patterns cut into material and filled with Silver
Inlay - Gold	X15	sculpt	Patterns cut into material and filled with Gold
Inlay - Copper	X3	sculpt	Patterns cut into material and filled with Copper
Polish	X1.5	smith	Material is burnished to a mirror shine
Gold Wash	X5	chem	A golden tint is formed on the metal
Pattern Hammering	X2	smith	The hammer marks are left showing in intricate patterns
Runes	X2	smith	Lettering cut and faced into material

STARCLUSTER - EQUIPMENT: WEAPONS

Materials for Hilts and Hafts

Item	Cost Modifier	Skill Required	Description
Leather wrapping	X1	tan	Wrapping around haft to cushion the grip
Cotton wrapping	X.8	weav	Wrapping around haft to cushion the grip
Sharkskin wrapping	X3	tan	Wrapping around haft to cushion the grip -non-skid grip
Wire wrap - gold	X3	smith	Counter-wrap to hold soft material on - decorative
Wire wrap - silver	X2	smith	Counter-wrap to hold soft material on - decorative
Wire wrap - copper	X1.5	smith	Counter-wrap to hold soft material on - decorative

Crosspiece

Item	Cost Modifier	Skill Required	Description
Plain	X1	smith	Standard
Filigree	X1.5	smith	Fancy
Bejeweled	+ jewel cost X 1.2	smith	Fancy with jewels mounted
Bladed	X2	smith	Dagger blades mounted in place of crosspiece. Damage +0 instead of normal attack
Gold wash	X2	chem	Golden tint is formed on the metal
Silver wash	X1.5	chem	Silver tint is formed on the metal
None	X.8	none	No crosspiece

Pommel/Shoe

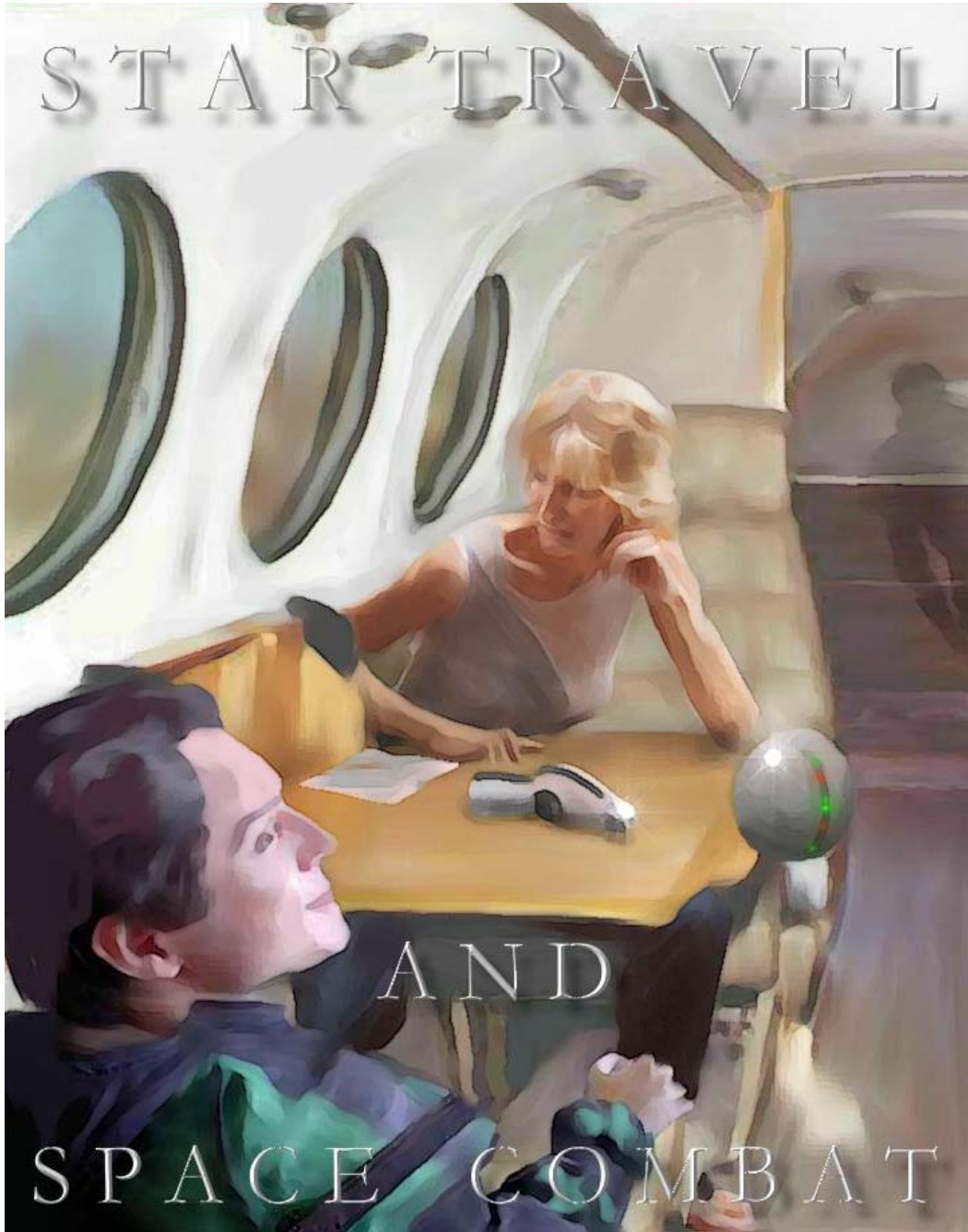
Item	Cost Modifier	Skill Required	Description
Brass knob/shoe plain	X1	smith	Standard
Silver knob/shoe plain	X2	smith	Silver material
Gold knob/shoe plain	X3	smith	Gold material
Copper knob/shoe plain	X1.5	smith	Copper Material
Fancy knob/shoe	X1.5	smith	Decorative Shape
Bejeweled knob/shoe	+ jewel cost X1.2	smith	Set with Jewels

Workmanship Cost Modifier

Superb X2
 Excellent X1.5
 Good X1
 Poor X.5
 Slipshod X.3

Multiply the base cost of the weapon by the modifiers to find the final cost.

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT



STARCLUSTER GUIDE TO STAR TRAVEL AND SPACE COMBAT

BY CLASH BOWLEY AND ALBERT BAILEY

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

THE VARIOUS METHODS OF SPACE TRAVEL

Space travel in StarCluster is by several methods. First is A-Grav. A-Grav is a field which is generated by an A-Grav drive. Within the boundaries of the field, gravity - up to the mass limit of the drive - is arbitrary. It can be whatever is desired, and from any particular direction. As a space drive, it only works in the presence of a large body which can be pushed against or attracted to effectively. Weapons pods use A-Grav to move around outside the ship. Ships and pods use it to lift from planetary surface to space. Of course, internally it makes possible acceleration faster than the human physical limit. A-Grav is a Technology Level 9 device, and is the key breakthrough technology of that Tech Level.

The second method of space travel in the Cluster is by G-Drive. G-Drive is a constant acceleration reaction drive, caused by combining matter and anti-matter in a burn chamber. Most of the mass of the drive is complex maze of gravitic piping and shielding, used for the handling of matter and anti-matter safely. G-Drive is used to travel from place to place within a star system. It can be used to travel from star to star, in fact the Diasporan settlement of the Cluster was by constant acceleration (fusion) drive alone, but travel times are long due to relativistic speed limits.

It can take years to travel between stars even at very fast accelerations. G-Drive itself uses gravitic enhancement, and is rated by the number of G's, or standard gravity units of acceleration, it produces. G-Drive is a Technology Level 9 device.

The third method of travel is by Jump. Jump is a field effect, like A-Grav. Within a Jump field, everything up to the rated mass limit becomes detached from the normal space-time continuum. The ship becomes, in effect, located nowhere. Within the field, the Navigator uses her skill and psionic power to 'focus' the ship into a new location, and the ship returns to the universe at that location. The two attributes of the Navigator are Navigation Skill - which determines how fast the transit is in objective time - and Psionic Power - which determines how far away the relocation can be.

Jump Travel is by Jump Routes. Jump routes are formed by a complex relationship of stellar type and location. The Jump Routes for the Cluster are a closed system, meaning there is no way to use a Jump Drive to enter or leave the cluster. The only way in or out is via slow constant acceleration travel.

Jump along a particular Jump Route can only be effected at one point in every system. This point is called the Jump Point for that Route, and there are as many Jump Points as there are Routes. It is always located somewhere on Orbit 1 of the system, but it's exact location changes continually.

Astronomers can locate the jump point by a tedious process of estimation, which is why all Jump Ships must carry an astronomer, to locate the Jump Point. Jump Points must be entered into at a particular speed, that being the speed at which the relative motion on the ship and of the system you are entering into are zero. The other end of a Jump Route is the Exit point. The exit point is a place somewhere on the orbit after the last occupied orbit of a star. In other words, if the last planet is in Orbit 4, then the Exit Point is located somewhere in Orbit 5. Astronomers can locate it by the same process used in locating Jump points, but it is almost never done. The ship exits the Jump Route at a relative speed of zero in comparison to the system it is entering.

Do not think that because the relationships between the star systems are called Jump Routes that they are some kind of space highway which is traveled by ships. Nothing travels along these routes. The ship ceases to be part of our normal frame of reference at the Jump Point of one system and becomes part of the universe again at the Exit Point of another. Jump Drive is a Technology Level 10 device.

The fourth method is by Fusion Drive. Fusion Drive is a method used by Tech Level 8 cultures to travel within a star system. There are 2 types of fusion drive and they are a constant acceleration drive, analogous to G-Drive, except that they fuse hydrogen nuclei to produce power. Fusion Drive is fairly inexpensive and efficient, but not as good as G-Drive.

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The fifth method is by Fission Drive. Fission Drive uses the power obtained by splitting heavy elements to drive ships through star systems. It is an order of magnitude (or more) less efficient than Fusion Drive, and used for the same purpose. Fission Drive becomes available at Tech Level 7. The sixth and final method of travel is by Chemical Rocket. Chemical Rocket is the most inefficient drive of all, but for various reasons is used in Tech Level 7, when it becomes available, as the main means of lifting things to orbit from a planetary surface.

TECHNOLOGY LEVELS

Reference has been made here to Technology Levels, also called Tech Levels or TL. Tech Levels are a rating of the capacity of a culture to build and repair a certain type of technology. The Standard Tech Levels are given below:

TL	Age	Description ¹
1	Stone Age	Beginnings of Agriculture, towns and cities. Trade is by barter. Stone, Copper, and Wood are the characteristic materials. The defining technology is Agriculture.
2	Ancient Age	City-states and empires. The first real roads. Trade is by coin and barter. Iron and Bronze are the characteristic materials. The defining technology is Metalworking.
3	Medieval Age	Feudalism, peasants, and serfs. Trade is in coin or by barter. The characteristic materials are Stone, Wood, and Iron. The defining Technology is Fortification.
4	Renaissance	Growth of cities and trade, and new knowledge. Trade is in coin, and the characteristic materials are Steel, Stone, and Plaster. The defining Technology is Printing.
5	Age of Discovery	Voyaging, exploration, and colonization. Trade is in coin and paper backed by bullion. The characteristic materials are Wood, Iron, and Cloth. The defining technology is Steam.
6	Age of War	Revolution, war, and the first exploits of true science. Trade is in paper backed by coin or bullion. The characteristic materials are Steel and Concrete. The defining technology is Internal Combustion.
7	Age of Science	Science and trade are king. Crude chemical rockets propel tiny payloads into space. Trade is in paper backed by goodwill. The characteristic materials are Aluminum and Plastics. The defining technology is Computers.
8	Space Age	Fusion Drive, Mag-lev, colonization of nearby planets and moons. Trade is in paper and credits. The characteristic material is Ceramic. The defining technology is Fusion.
9	Interplanetary Age	A-Grav, G-Drive, and robotics. Trade is in credits. The characteristic materials are Plasteel and Ceramic. The defining technology is A-Grav.
10	Interstellar Age	Jump Drive, interstellar colonization, and MatT-ran. Trade is in credits. The characteristic material is Active Plasteel. The defining technology is Mental Control.

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While it is possible to get an item from a higher tech culture on a lower tech world, it is very expensive because the item cannot be manufactured by lower tech methods. Primitive cultures, that is from Tech Level 1 through Tech Level 4, are not traded with, as the impact on such cultures would be catastrophic. Observers are sent down to study these primitive cultures in as unobtrusive a manner as possible. Backwards cultures, those of Technology Levels from five to seven, are traded with openly. These cultures are advanced enough to withstand the cultural shock of advanced technology. Backwards Diasporan cultures are allowed into both the Diasporan Community and SaVaHuTa, but they have no voting privileges. They are also not taxed, and have the benefits of membership in the larger communities. Advanced cultures, those rated with Tech Levels of eight and above, are the heart of modern civilization. These are the cultures that build and operate starships, that colonize and trade throughout the Cluster. Not all areas of a world are necessarily the same Tech Level.

Nomenclature

StarCluster uses some words in fairly specific, nonstandard ways. Below are some examples of StarCluster talk:

- Ship** A space vehicle of over 100 Tons.
- Pod** A space vehicle of 100 Tons or less.
- Jump Ship** A ship with Jump Drive.
- Jump Pod** A pod with Jump Drive.
- Space Ship** A ship without Jump Drive.
- Lifeboat** A pod designed to be carried on a ship, used for escaping disasters.
- Weapons Pod** A pod designed to be carried on a ship, housing weapons. These pods are remotely operated by gunners. Since they operate using A-Grav, they are only available at TL 9 or 10.
- Weapons Turret** A turret carrying weapons. These are only used in TL 7-8 ships and pods, since weapon pods are inherently superior. A turret will cost the same as an equivalent pod, and be the same tonnage. A TL 8 ship which is atmospheric must enable the turrets to become recessed, at the same cost and tonnage as a ships bay.
- In-line Weapon** A weapon built into the ship or pod itself, aimed by pointing the whole ship or pod.
- Add-in** A standardized drop-in sub unit. Used on pods because of the premium of space and flexibility over cost. Weapon Add-ins are either in-line weapons or turrets. Turreted weapons require a separate gunner, as the pilot fires in-line weapons. Add-ins can be swapped out in any ships bay.
- Station** A cluster of equipment optimized to allow an operator to perform a specific function. A more powerful station can be reprogrammed to substitute for a lesser station, if necessary.
- Pod Deployment** Pods are normally carried inside the ships bay or their own specialized weapons bays. In order to use them, the pods must be “deployed” - i.e. moved outside the vessel. This is considered an aggressive act and may be grounds for shooting, especially with police, customs, or naval vessels. Naval vessels usually travel with pods deployed, except during pod refueling and Jump.

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Scan Detection and measurement instrumentation. Scan uses both passive - no detectable emissions - and active methods to locate and quantify hazards. Active scan can be turned off. With active scan off, and shields and drives off, a ship cannot be easily differentiated from asteroids or other space debris.

Shields Protective measures used by ship to defend itself. This is a collective term which covers a number of different technologies such as antimissile lasers and mass drivers, reflective plasma fields, EM dispersion, and other measures. Shields are an active defense, and require skill and knowledge to use.

Engineering Works with the various systems and subsystems on a ship or pod, primarily the drives.

M/AM Fuel Matter and anti-matter. Each fuel component is kept separate until combined in the mixing/combustion chamber.

Observatory Area containing instrumentation for locating and identifying objects in space. Used by astronomers for finding Jump Points and assisting in targeting during combat.

Trivox Literally "three voice". Trivox is a 3 dimensional display system. It can be used in passive mode - watching prerecorded programs - or active mode - playing games and simulations. Trivox can be watched from a distance, or with personal gear, immersively, where the person is part of the action.

Ships without A-Grav It is possible that ships built on TL 9 or 10 worlds might have G drive, but no A-Grav. Humans and Humanoids can withstand indefinite time at up to 2G constant acceleration, but higher G forces can only be withstood for limited periods. Generally, ships without A-Grav have a maximum constant velocity of 2G, but can use reserve power for maneuvering in battle. For example, an A-Gravless ship can be constructed with a G-Drive rated at 6G, but when traveling can only boost at 2G. In combat, all 6Gs may be used. When using more than 2G, people and cargo must be secured and safety procedures followed. Even a ceramic coffee mug can be a lethal weapon at 6 G. People can be fitted into special G-compensation seating, and special suits can also be worn to increase this limit to 3G.

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SPACE COMBAT

Space combat in StarCluster is turn based, the same as individual combat. Each side determines it's to hit, damage, and shield factors. Then the two sides rolls percentile dice (%d). If there is a possible surprise situation, then the aggressor must roll 20 or more on its roll than the defender, as modified by the GM. If there is surprise, then the aggressor gets a full round to inflict damage on the defender before the defender can *hope* to defend itself.

In normal combat, the ships are on a roughly parallel track at roughly equivalent speeds. If the speeds or courses are radically different, there is only one shot for each side in the combat as they zip past each other.

The normal turn sequence is:

Each ship or manned pod involved rolls initiative on %d.

The highest initiative goes first.

Each other initiative follows.

When all possible action has been taken, the round is over and a new round begins.

During its offensive phase of the round, the ship or pod fires, using all its armament simultaneously, in an effort to overwhelm the shields of the opponent. The player adds the to hit modifier of the player's ship and the to be hit modifiers of the target to a %d roll. If the result is over 70, the shot was a hit on the opponent. Each weapon rolls to hit individually, if it bears on the target (weapon pods always bear) which the GM can determine. This depends on the shape of the vessel and the location of it's weapons. If there was a hit, the player adds all damage modifiers to a %d roll for each weapon, and compares the result to the Slight Damage Table. If the result is to roll on another table, reroll with the same modifiers on the specified table.

Modifiers To Be Hit (SF)

Each Shield Factor -2

Each Average Plus Pilot Skill -1

Each Average Plus Pilot Skill above +3 -1

Each Average Plus Pilot Skill above +5 -1

Each G of maximum thrust -2

Note: An average pilot skill of +7 would be worth -13. That would be -1 for each skill level for -7, -1 for each skill level above +3 for -4, and -1 for each skill level above +5 for -2. There may be more than one pilot working, especially on larger craft, so the average skill level is used.

The factor of the attitude jets on the craft is used as a multiplier for pilot skill - i.e. a pilot of skill level +7 using factor 3 attitude jets has a $-13 * 3$ or -36 modifier.

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Modifiers To Hit (HF)

Each Plus ShGuns Skill +1

Each ShGuns Skill Plus above +3 +2

Each ShGuns Skill Plus above +5 +2

Each Astr Skill Plus +1

Each Astr Skill Plus above +3 +2

Each Astr Skill Plus above +5 +2

Note: An Astr skill of +7 would be worth +19. That would be +1 for each skill level for +7, +2 for each skill level above +3 for +8, and +2 for each skill level above +5 for +4. There is only one Astronomer working at any given time on a ship or pod. Gunnery skill can be used instead of Ship's Guns at a modifier of gunnery*.5, rounded up. This means that a player with the gunnery skill can use Ship's Guns at half effectiveness. A mastery of ships guns, that is a skill level of +5, allows a second shot to be taken. At second level of mastery, that is a skill level of +10, a third shot is allowed. No amount of mastery will allow a fourth shot, as the ship's guns require a finite amount of time to reset. The second shot is taken 10 initiatives after the first shot, and the third shot is taken 10 initiatives after the second.

Damage Modifiers (DF)

Each point of HF +1

Each plus of the weapon used +1

Note: For instance a TL9 laser is a +10 damage. The player adds +10 to the HF to get the total damage modifier.

Damage Tables

Slight Damage

%d	Result
01-15	Main Drive hit. -1G acceleration.
16-25	Shields damaged. -1 SF.
26-35	Weapon hit. -5 DF.
36-46	Main Drive hit. -2G acceleration.
47-60	Shields damaged. -2 SF.
61-70	Weapon hit. -10 DF.
71-80	Main Drive hit. -3G acceleration.
81-85	Weapon hit. -15 DF.
86-89	Roll on Moderate Damage.
90-93	Roll on Moderate Damage.
94-96	Roll on Moderate Damage.
97-99	Roll on Heavy Damage.
00+	Roll on Heavy Damage.

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Moderate Damage

%d Result

- 01-15 Shields damaged. -3 SF.
- 16-25 Main Drive damaged. -4G acceleration.
- 26-35 Maneuvering damaged. -4 SF.
- 36-46 Weapon systems damaged. -20 DF.
- 47-60 A-Grav damaged. -5 G acceleration.
- 61-70 Weapon control damaged. -25 DF.
- 71-80 Weapon control damaged. -30 DF.
- 81-93 Roll on Heavy Damage.
- 94-00+ Roll on Severe Damage.

Heavy Damage

%d Result

- 01-15 Comm/Radio out.
- 16-25 Scan/Radar out.
- 26-35 Nav out. (Maneuvering if no nav.)
- 36-46 Computer out.
- 47-60 Engineering out.
- 61-70 Observatory out.
- 71-80 A-Grav out.
- 81-00+ Roll on Severe Damage

Severe Damage

%d Result

- 01-15 A-Grav Destroyed
- 16-25 Observatory Destroyed
- 26-35 Jump Drive Destroyed
- 36-46 Main Drive Destroyed
- 47-60 Shields Destroyed
- 61-70 Gun Systems Destroyed
- 71-80 Maneuvering Destroyed
- 81-85 Breach 1 Deck
- 86-89 Breach 2 Decks
- 90-93 Breach 3 Decks
- 94-99 Bridge Destroyed
- 00+ Ship Destroyed

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Any system which is "Out" may be repaired by appropriately skilled person in 5 rounds, -1 round per 3 levels of skill used, i.e. a person with skill+4 can repair it in 4 rounds. A person with skill+7 can repair it in 3 rounds.

Any system which is "Destroyed" cannot be repaired outside of complete replacement in a shipyard.

Any person in a destroyed section may make a survival roll of 10%, otherwise they are dead.

Any person in a deck which is breached must have private oxygen supply or they are dead.

Damage can be arbitrarily limited to attempt disabling of the target rather than destruction. In this case, a limit of 90 is used on

each table. Anything over 90 on the Slight, Moderate, or Severe Damage tables is counted as a miss. A roll over 90 on the Severe Damage table must be rerolled on the Slight Damage table with no limits.

This is a dangerous tactic, and the heavier the weapons, the more dangerous it is, as the higher damage modifiers force more care to be taken - and consequently make it easier to miss.

Tech Level 8 "Shields" or "Deflector Equipment"

At TL8, the first shields begin to come into use. These are called "Deflector Equipment" in the Spaceship Design Guide to differentiate them from the perfected "shields" available at TL9 and 10.

The Deflector Equipment available at TL8, while effective, has serious faults. Shields must be lowered in order for beam weapons such as lasers to fire. Normally, at TL9+ this only takes a microsecond or two, and there is no danger of shots getting through, but at TL8, the Deflector Equipment may surge on raising, and create an arc from the shields to the ship. Every time Deflector Equipment is raised, there is a 5% chance that the Deflector shield will arc. If this results, roll on the Slight Damage Table as if a hit occurred, with the following adjustments:

+20 if the ship is not adequately maintained (has too few maintenance people for its size)

-5 per level of skill (programming) of the operator of the Deflector Console. If more than one operator, use the average skill level. A damage roll of less than 1 should be counted as no significant damage.

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JUMP TABLE

When using Jump Drive, roll percentile dice on the following table. Subtract 10 from the roll for every nav skill level. Add 10 to the roll for each number in the length of the jump route - i.e. A route length of 2 adds 20 to the roll. Minimum is zero. If the result is over 100, the jump fails and must be retried. Retrying a Jump is a delicate procedure. The ship must come to a full stop relative to the destination system exactly at the Jump Point. This takes hours of maneuvering, 10 hours at 1G. This is shortened by the acceleration of the ship, so at 2Gs it would take 5 hours, 3.33 hours at 3G, 2.5 hours at 4G, etc.

%d roll	Objective time taken in Jump
0	2 hours
01-10	5 hours
10-20	10 hours
21-30	1 day
31-40	2 days
41-50	5 days
51-60	10 days
61-70	20 days
71-80	40 days
81-90	80 days
91-99	160 days
00	320 days



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THE ORBITS

The 10 available standard orbits are centered at the following distance from the star:

Orbit # Distance in miles

1	35,000,000
2	65,000,000
3	90,000,000
4	150,000,000
5	275,000,000
6	500,000,000
7	1,000,000,000
8	2,000,000,000
9	3,000,000,000
10	4,000,000,000

To find Transit Time:

Find correct Table for the Ship's G-Drive acceleration

Find Orbit# of starting point in row.

Find Orbit# of Destination in column.

Cross reference - i.e. find where row and column intersect.

Do above to find Maximum and Minimum Transit times.

Find difference between Maximum and Minimum - i.e. subtract min from max.

Roll % and divide by 100, this gets a percentage.

Multiply percentage times difference.

Add result to minimum.

With constant acceleration, the longer you travel, the faster you go. You have to speed up to the half-way point then slow down the rest of the way because otherwise you'd overshoot your destination.

The times given for transit are in objective time, that is, time as the universe measures it. The subjective time, that is, time as the ship measures it, would be somewhat less due to relativistic effects. Since the speed of light is 670,616,629.38 MPH, there would be some slight time dilation, but the difference is negligible for the effort expended. Over longer trips with higher maximum speed, time dilation could be significant, but the math involved is far too difficult for most people.

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TRANSIT TIMES AT 1G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	71.00	79.00	97.00	125.00	164.00	229.00	321.00	392.00	452.00
2	71.00	0.00	89.00	104.00	131.00	169.00	232.00	323.00	394.00	453.00
3	79.00	89.00	0.00	110.00	136.00	173.00	235.00	325.00	395.00	455.00
4	97.00	104.00	110.00	0.00	147.00	181.00	241.00	330.00	399.00	458.00
5	125.00	131.00	136.00	147.00	0.00	198.00	254.00	339.00	407.00	465.00
6	164.00	169.00	173.00	181.00	198.00	0.00	275.00	356.00	421.00	477.00
7	229.00	232.00	235.00	241.00	254.00	275.00	0.00	389.00	450.00	503.00
8	321.00	323.00	325.00	330.00	339.00	356.00	389.00	0.00	503.00	551.00
9	392.00	394.00	395.00	399.00	407.00	421.00	450.00	503.00	0.00	595.00
10	452.00	453.00	455.00	458.00	465.00	477.00	503.00	551.00	595.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	39.00	53.00	76.00	79.00	153.00	221.00	315.00	387.00	448.00
2	39.00	0.00	36.00	66.00	103.00	148.00	217.00	313.00	385.00	446.00
3	53.00	36.00	0.00	55.00	97.00	144.00	214.00	311.00	384.00	445.00
4	76.00	66.00	55.00	0.00	79.00	133.00	207.00	306.00	380.00	441.00
5	79.00	103.00	97.00	79.00	0.00	107.00	191.00	295.00	371.00	434.00
6	153.00	148.00	144.00	133.00	107.00	0.00	159.00	275.00	356.00	421.00
7	221.00	217.00	214.00	207.00	191.00	159.00	0.00	225.00	318.00	389.00
8	315.00	313.00	311.00	306.00	295.00	275.00	225.00	0.00	225.00	318.00
9	387.00	385.00	384.00	380.00	371.00	356.00	318.00	225.00	0.00	225.00
10	448.00	446.00	445.00	441.00	434.00	421.00	389.00	318.00	225.00	0.00

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TRANSIT TIMES AT 26

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	50.00	56.00	68.00	89.00	116.00	162.00	227.00	277.00	319.00
2	50.00	0.00	63.00	74.00	93.00	120.00	164.00	228.00	278.00	321.00
3	56.00	63.00	0.00	78.00	96.00	122.00	166.00	230.00	279.00	322.00
4	68.00	74.00	78.00	0.00	104.00	128.00	170.00	233.00	282.00	324.00
5	89.00	93.00	96.00	104.00	0.00	140.00	180.00	240.00	288.00	329.00
6	116.00	120.00	122.00	128.00	140.00	0.00	195.00	251.00	297.00	337.00
7	162.00	164.00	166.00	170.00	180.00	195.00	0.00	275.00	318.00	356.00
8	227.00	228.00	230.00	233.00	240.00	251.00	275.00	0.00	356.00	389.00
9	277.00	278.00	279.00	282.00	288.00	297.00	318.00	356.00	0.00	421.00
10	319.00	321.00	322.00	324.00	329.00	337.00	356.00	389.00	421.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	28.00	37.00	54.00	56.00	108.00	156.00	223.00	274.00	317.00
2	28.00	0.00	25.00	46.00	73.00	105.00	154.00	221.00	272.00	315.00
3	37.00	25.00	0.00	39.00	68.00	102.00	152.00	220.00	271.00	314.00
4	54.00	46.00	39.00	0.00	56.00	94.00	147.00	216.00	268.00	312.00
5	56.00	73.00	68.00	56.00	0.00	75.00	135.00	209.00	262.00	307.00
6	108.00	105.00	102.00	94.00	75.00	0.00	112.00	195.00	251.00	297.00
7	156.00	154.00	152.00	147.00	135.00	1.00	12.00	0.00	225.00	275.00
8	223.00	221.00	220.00	216.00	209.00	195.00	159.00	0.00	159.00	225.00
9	274.00	272.00	271.00	268.00	262.00	251.00	225.00	159.00	0.00	159.00
10	317.00	315.00	314.00	312.00	307.00	297.00	275.00	225.00	159.00	0.00

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TRANSIT TIMES AT 3G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1.00	0.00	41.00	46.00	56.00	72.00	95.00	132.00	185.00	226.00	261.00
1	41.00	0.00	51.00	60.00	76.00	98.00	134.00	187.00	227.00	262.00
2	46.00	51.00	0.00	64.00	78.00	100.00	136.00	188.00	228.00	263.00
3	56.00	60.00	64.00	0.00	85.00	105.00	139.00	190.00	230.00	264.00
4	72.00	76.00	78.00	85.00	0.00	114.00	147.00	196.00	235.00	268.00
5	95.00	98.00	100.00	105.00	114.00	0.00	159.00	205.00	243.00	275.00
6	132.00	134.00	136.00	139.00	147.00	159.00	0.00	225.00	260.00	290.00
7	185.00	187.00	188.00	190.00	196.00	205.00	225.00	0.00	290.00	318.00
8	226.00	227.00	228.00	230.00	235.00	243.00	260.00	290.00	0.00	343.00
9	261.00	262.00	263.00	264.00	268.00	275.00	290.00	318.00	343.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	22.00	30.00	44.00	46.00	89.00	128.00	182.00	224.00	258.00
2	22.00	0.00	21.00	38.00	59.00	86.00	126.00	181.00	222.00	258.00
3	30.00	21.00	0.00	32.00	56.00	83.00	124.00	179.00	221.00	257.00
4	44.00	38.00	32.00	0.00	46.00	77.00	120.00	177.00	219.00	255.00
5	46.00	59.00	56.00	46.00	0.00	62.00	111.00	170.00	214.00	251.00
6	89.00	86.00	83.00	77.00	62.00	0.00	92.00	159.00	205.00	243.00
7	128.00	126.00	124.00	120.00	111.00	92.00	0.00	130.00	184.00	225.00
8	182.00	181.00	179.00	177.00	170.00	159.00	130.00	0.00	130.00	184.00
9	224.00	222.00	221.00	219.00	214.00	205.00	184.00	130.00	0.00	130.00
10	258.00	258.00	257.00	255.00	251.00	243.00	225.00	184.00	130.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 4G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	36.00	40.00	48.00	63.00	82.00	114.00	160.00	196.00	226.00
2	36.00	0.00	44.00	52.00	66.00	85.00	116.00	162.00	197.00	227.00
3	40.00	44.00	0.00	55.00	68.00	86.00	117.00	163.00	198.00	227.00
4	48.00	52.00	55.00	0.00	73.00	91.00	121.00	165.00	200.00	229.00
5	63.00	66.00	68.00	73.00	0.00	99.00	127.00	170.00	203.00	232.00
6	82.00	85.00	86.00	91.00	99.00	0.00	138.00	178.00	210.00	238.00
7	114.00	116.00	117.00	121.00	127.00	138.00	0.00	195.00	225.00	251.00
8	160.00	162.00	163.00	165.00	170.00	178.00	195.00	0.00	251.00	275.00
9	196.00	197.00	198.00	200.00	203.00	210.00	225.00	251.00	0.00	297.00
10	226.00	227.00	227.00	229.00	232.00	238.00	251.00	275.00	297.00	0.00

Minimum Transit Time in Hours

Orbit #	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
1	0.00	19.00	26.00	38.00	40.00	77.00	110.00	158.00	194.00	224.00
2	19.00	0.00	18.00	33.00	52.00	74.00	109.00	156.00	193.00	223.00
3	26.00	18.00	0.00	28.00	48.00	72.00	107.00	155.00	192.00	222.00
4	38.00	33.00	28.00	0.00	40.00	67.00	104.00	153.00	190.00	221.00
5	40.00	52.00	48.00	40.00	0.00	53.00	96.00	148.00	186.00	217.00
6	77.00	74.00	72.00	67.00	53.00	0.00	79.00	138.00	178.00	210.00
7	110.00	109.00	107.00	104.00	96.00	79.00	0.00	112.00	159.00	195.00
8	158.00	156.00	155.00	153.00	148.00	138.00	112.00	0.00	112.00	159.00
9	194.00	193.00	192.00	190.00	186.00	178.00	159.00	112.00	0.00	112.00
10	224.00	223.00	222.00	221.00	217.00	210.00	195.00	159.00	112.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 5G

Maximum Transit Time in Hours

Orbit #	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
1	0.00	32.00	36.00	43.00	56.00	74.00	102.00	143.00	175.00	202.00
2	32.00	0.00	40.00	47.00	59.00	76.00	104.00	144.00	176.00	203.00
3	36.00	40.00	0.00	49.00	61.00	77.00	105.00	145.00	177.00	203.00
4	43.00	47.00	49.00	0.00	66.00	81.00	108.00	147.00	178.00	205.00
5	56.00	59.00	61.00	66.00	0.00	89.00	114.00	152.00	182.00	208.00
6	74.00	76.00	77.00	81.00	89.00	0.00	123.00	159.00	188.00	213.00
7	102.00	104.00	105.00	108.00	114.00	123.00	0.00	174.00	201.00	225.00
8	143.00	144.00	145.00	147.00	152.00	159.00	174.00	0.00	225.00	246.00
9	175.00	176.00	177.00	178.00	182.00	188.00	201.00	225.00	0.00	266.00
10	202.00	203.00	203.00	205.00	208.00	213.00	225.00	246.00	266.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	17.00	24.00	34.00	36.00	69.00	99.00	141.00	173.00	200.00
2	17.00	0.00	16.00	29.00	46.00	66.00	97.00	140.00	172.00	199.00
3	24.00	16.00	0.00	25.00	43.00	64.00	96.00	139.00	172.00	199.00
4	34.00	29.00	25.00	0.00	36.00	59.00	93.00	137.00	170.00	197.00
5	36.00	46.00	43.00	36.00	0.00	48.00	86.00	132.00	166.00	194.00
6	69.00	66.00	64.00	59.00	48.00	0.00	71.00	123.00	159.00	188.00
7	99.00	97.00	96.00	93.00	86.00	71.00	0.00	101.00	142.00	174.00
8	141.00	140.00	139.00	137.00	132.00	123.00	101.00	0.00	101.00	142.00
9	173.00	172.00	172.00	170.00	166.00	159.00	142.00	101.00	0.00	101.00
10	200.00	199.00	199.00	197.00	194.00	188.00	174.00	142.00	101.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 6G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	29.00	32.00	39.00	51.00	67.00	93.00	131.00	160.00	184.00
2	29.00	0.00	36.00	43.00	54.00	69.00	95.00	132.00	161.00	185.00
3	32.00	36.00	0.00	45.00	55.00	71.00	96.00	133.00	161.00	186.00
4	39.00	43.00	45.00	0.00	60.00	74.00	98.00	135.00	163.00	187.00
5	51.00	54.00	55.00	60.00	0.00	81.00	104.00	138.00	166.00	190.00
6	67.00	69.00	71.00	74.00	81.00	0.00	112.00	145.00	172.00	195.00
7	93.00	95.00	96.00	98.00	104.00	112.00	0.00	159.00	184.00	205.00
8	131.00	132.00	133.00	135.00	138.00	145.00	159.00	0.00	205.00	225.00
9	160.00	161.00	161.00	163.00	166.00	172.00	184.00	205.00	0.00	243.00
10	184.00	185.00	186.00	187.00	190.00	195.00	205.00	225.00	243.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	16.00	22.00	31.00	32.00	63.00	90.00	129.00	158.00	183.00
2	16.00	0.00	15.00	27.00	42.00	61.00	89.00	128.00	157.00	182.00
3	22.00	15.00	0.00	22.00	39.00	59.00	88.00	127.00	157.00	182.00
4	31.00	27.00	22.00	0.00	32.00	54.00	85.00	125.00	155.00	180.00
5	32.00	42.00	39.00	32.00	0.00	44.00	78.00	121.00	152.00	177.00
6	63.00	61.00	59.00	54.00	44.00	0.00	65.00	112.00	145.00	172.00
7	90.00	89.00	88.00	85.00	78.00	65.00	0.00	92.00	130.00	159.00
8	129.00	128.00	127.00	125.00	121.00	112.00	92.00	0.00	92.00	130.00
9	158.00	157.00	157.00	155.00	152.00	145.00	130.00	92.00	0.00	92.00
10	183.00	182.00	182.00	180.00	177.00	172.00	159.00	130.00	92.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 76

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	27.00	30.00	37.00	47.00	62.00	86.00	121.00	148.00	171.00
2	27.00	0.00	33.00	39.00	50.00	64.00	88.00	122.00	149.00	171.00
3	30.00	33.00	0.00	42.00	51.00	65.00	89.00	123.00	149.00	172.00
4	37.00	39.00	42.00	0.00	55.00	69.00	91.00	125.00	151.00	173.00
5	47.00	50.00	51.00	55.00	0.00	75.00	96.00	128.00	154.00	176.00
6	62.00	64.00	65.00	69.00	75.00	0.00	104.00	134.00	159.00	180.00
7	86.00	88.00	89.00	91.00	96.00	104.00	0.00	147.00	170.00	190.00
8	121.00	122.00	123.00	125.00	128.00	134.00	147.00	0.00	190.00	208.00
9	148.00	149.00	149.00	151.00	154.00	159.00	170.00	190.00	0.00	225.00
10	171.00	171.00	172.00	173.00	176.00	180.00	190.00	208.00	225.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	15.00	20.00	29.00	30.00	58.00	83.00	119.00	146.00	169.00
2	15.00	0.00	13.00	25.00	39.00	56.00	82.00	118.00	146.00	169.00
3	20.00	13.00	0.00	21.00	37.00	54.00	81.00	117.00	145.00	168.00
4	29.00	25.00	21.00	0.00	30.00	50.00	78.00	116.00	143.00	167.00
5	30.00	39.00	37.00	30.00	0.00	40.00	72.00	112.00	140.00	164.00
6	58.00	56.00	54.00	50.00	40.00	0.00	60.00	104.00	134.00	159.00
7	83.00	82.00	81.00	78.00	72.00	60.00	0.00	85.00	120.00	147.00
8	119.00	118.00	117.00	116.00	112.00	104.00	85.00	0.00	85.00	120.00
9	146.00	146.00	145.00	143.00	140.00	134.00	120.00	85.00	0.00	85.00
10	169.00	169.00	168.00	167.00	164.00	159.00	147.00	120.00	85.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 8G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	25.00	28.00	34.00	44.00	58.00	81.00	113.00	138.00	160.00
2	25.00	0.00	31.00	37.00	46.00	60.00	82.00	114.00	139.00	160.00
3	28.00	31.00	0.00	39.00	48.00	61.00	83.00	115.00	140.00	161.00
4	34.00	37.00	39.00	0.00	52.00	64.00	85.00	117.00	141.00	162.00
5	44.00	46.00	48.00	52.00	0.00	70.00	90.00	120.00	144.00	164.00
6	58.00	60.00	61.00	64.00	70.00	0.00	97.00	126.00	149.00	169.00
7	81.00	82.00	83.00	85.00	90.00	97.00	0.00	138.00	159.00	178.00
8	113.00	114.00	115.00	117.00	120.00	126.00	138.00	0.00	178.00	195.00
9	138.00	139.00	140.00	141.00	144.00	149.00	159.00	178.00	0.00	210.00
10	160.00	160.00	161.00	162.00	164.00	169.00	178.00	195.00	210.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0 1	4.00	19.00	27.00	28.00	54.00	78.00	111.00	137.00	158.00
2	14.00	0.00	13.00	23.00	36.00	52.00	77.00	111.00	136.00	158.00
3	19.00	13.00	0.00	19.00	34.00	51.00	76.00	110.00	136.00	157.00
4	27.00	23.00	19.00	0.00	28.00	47.00	73.00	108.00	134.00	156.00
5	28.00	36.00	34.00	28.00	0.00	38.00	68.00	104.00	131.00	153.00
6	54.00	52.00	51.00	47.00	38.00	0.00	56.00	97.00	126.00	149.00
7	78.00	77.00	76.00	73.00	68.00	56.00	0.00	79.00	112.00	138.00
8	111.00	111.00	110.00	108.00	104.00	97.00	79.00	0.00	79.00	112.00
9	137.00	136.00	136.00	134.00	131.00	126.00	112.00	79.00	0.00	79.00
10	158.00	158.00	157.00	156.00	153.00	149.00	138.00	112.00	79.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 9G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	24.00	26.00	32.00	42.00	55.00	76.00	107.00	131.00	151.00
2	24.00	0.00	30.00	35.00	44.00	56.00	77.00	108.00	131.00	151.00
3	26.00	30.00	0.00	37.00	45.00	58.00	78.00	108.00	132.00	152.00
4	32.00	35.00	37.00	0.00	49.00	60.00	80.00	110.00	133.00	153.00
5	42.00	44.00	45.00	49.00	0.00	66.00	85.00	113.00	136.00	155.00
6	55.00	56.00	58.00	60.00	66.00	0.00	92.00	119.00	140.00	159.00
7	76.00	77.00	78.00	80.00	85.00	92.00	0.00	130.00	150.00	168.00
8	107.00	108.00	108.00	110.00	113.00	119.00	130.00	0.00	168.00	184.00
9	131.00	131.00	132.00	133.00	136.00	140.00	150.00	168.00	0.00	198.00
10	151.00	151.00	152.00	153.00	155.00	159.00	168.00	184.00	198.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	13.00	18.00	25.00	26.00	51.00	74.00	105.00	129.00	149.00
2	13.00	0.00	12.00	22.00	34.00	49.00	72.00	104.00	128.00	149.00
3	18.00	12.00	0.00	18.00	32.00	48.00	71.00	104.00	128.00	148.00
4	25.00	22.00	18.00	0.00	26.00	44.00	69.00	102.00	127.00	147.00
5	26.00	34.00	32.00	26.00	0.00	36.00	64.00	98.00	124.00	145.00
6	51.00	49.00	48.00	44.00	36.00	0.00	53.00	92.00	119.00	140.00
7	74.00	72.00	71.00	69.00	64.00	53.00	0.00	75.00	106.00	130.00
8	105.00	104.00	104.00	102.00	98.00	92.00	75.00	0.00	75.00	106.00
9	129.00	128.00	128.00	127.00	124.00	119.00	106.00	75.00	0.00	75.00
10	149.00	149.00	148.00	147.00	145.00	140.00	130.00	106.00	75.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

TRANSIT TIMES AT 10G

Maximum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	22.00	25.00	31.00	40.00	52.00	72.00	101.00	124.00	143.00
2	22.00	0.00	28.00	33.00	41.00	53.00	73.00	102.00	124.00	143.00
3	25.00	28.00	0.00	35.00	43.00	55.00	74.00	103.00	125.00	144.00
4	31.00	33.00	35.00	0.00	46.00	57.00	76.00	104.00	126.00	145.00
5	40.00	41.00	43.00	46.00	0.00	63.00	80.00	107.00	129.00	147.00
6	52.00	53.00	55.00	57.00	63.00	0.00	87.00	112.00	133.00	151.00
7	72.00	73.00	74.00	76.00	80.00	87.00	0.00	123.00	142.00	159.00
8	101.00	102.00	103.00	104.00	107.00	112.00	123.00	0.00	159.00	174.00
9	124.00	124.00	125.00	126.00	129.00	133.00	142.00	159.00	0.00	188.00
10	143.00	143.00	144.00	145.00	147.00	151.00	159.00	174.00	188.00	0.00

Minimum Transit Time in Hours

Orbit #	1	2	3	4	5	6	7	8	9	10
1	0.00	12.00	17.00	24.00	25.00	48.00	70.00	100.00	122.00	142.00
2	12.00	0.00	11.00	21.00	33.00	47.00	69.00	99.00	122.00	141.00
3	17.00	11.00	0.00	17.00	31.00	46.00	68.00	98.00	121.00	141.00
4	24.00	21.00	17.00	0.00	25.00	42.00	66.00	97.00	120.00	140.00
5	25.00	33.00	31.00	25.00	0.00	34.00	61.00	93.00	117.00	137.00
6	48.00	47.00	46.00	42.00	34.00	0.00	50.00	87.00	112.00	133.00
7	70.00	69.00	68.00	66.00	61.00	50.00	0.00	71.00	101.00	123.00
8	100.00	99.00	98.00	97.00	93.00	87.00	71.00	0.00	71.00	101.00
9	122.00	122.00	121.00	120.00	117.00	112.00	101.00	71.00	0.00	71.00
10	142.00	141.00	141.00	140.00	137.00	133.00	123.00	101.00	71.00	0.00

STARCLUSTER - STAR TRAVEL AND SPACE COMBAT

MOON ORBITS

Moon orbits are much smaller than planetary orbits. All moon orbit travel takes less than 24 hours at 1G, so It's not worth the bother of accelerating any faster. Following are the standard moon orbits established by convention.

Orbit#	Distance in Miles from center of Primary
X+1	50000.00
X+2	80000.00
X+3	120000.00
X+4	250000.00
X+5	400000.00
X+6	650000.00
X+7	1200000.00
X+8	3500000.00
X+9	7000000.00
X+10	14000000.00

There may be more than one actual orbiting body in any given standard orbit, but they are treated as one moon. Any such occurrence is with tiny moonlets which can be taken in aggregate as one moon. If a name is given, it is for the largest such moonlet. For instance, Saturn's moons Tethys, Telesto, and Calypso share the exact same orbital radius, and Epimetheus and Janus have less than 50 km difference in their orbital radius. In this case, only Tethys is a major moon. The others are moonlets.

Use the following tables in the same manner as the preceding planetary orbit tables. In the case of going to the primary planet from a moon or vice versa, use the Orbit# x+1 column, as the difference is tiny.

Maximum Transit time - Moon Orbits - in hours

Orbit #	x+1	x+2	x+3	x+4	x+5	x+6	x+7	x+8	x+9	x+10
X+1	X	1.48	1.70	2.26	2.76	3.44	4.60	7.76	10.94	15.44
X+2	1.48	X	1.84	2.36	2.86	3.56	4.66	7.80	10.96	15.46
X+3	1.70	1.84	X	2.50	2.98	3.62	4.74	7.84	11.00	15.48
X+4	2.26	2.36	2.50	X	3.32	3.90	4.96	8.00	11.18	15.56
X+5	2.76	2.86	2.98	3.32	X	4.22	5.22	8.14	11.20	15.62
X+6	3.44	3.56	3.62	3.90	4.22	X	5.60	8.40	11.40	16.06
X+7	4.60	4.66	4.74	4.96	5.22	5.60	X	8.94	11.80	16.06
X+8	7.76	7.80	7.84	8.8.	14.00	8.40	8.94	X	13.36	17.24
X+9	10.94	10.96	11.00	11.18	11.20	11.40	11.80	13.36	X	18.88
X+10	15.44	15.46	15.48	15.56	15.62	15.76	16.06	17.24	18.88	X

Minimum Transit time - Moon Orbits - in hours

Orbit #	x+1	x+2	x+3	x+4	x+5	x+6	x+7	x+8	x+9	x+10
X+1	X	0.72	1.10	1.84	2.44	3.18	4.42	7.66	10.86	15.38
X+2	0.72	X	0.84	1.70	2.34	3.10	4.36	7.62	10.84	15.36
X+3	1.10	0.84	X	1.48	2.18	3.00	4.28	7.58	10.80	15.34
X+4	1.84	1.70	1.48	X	1.60	2.60	4.02	7.42	10.70	15.28
X+5	2.44	2.34	2.18	1.60	X	2.06	3.68	7.26	10.58	15.20
X+6	3.18	3.10	3.00	2.60	2.06	X	3.06	6.96	10.38	14.74
X+7	4.42	4.36	4.28	4.02	3.68	3.06	X	6.26	9.92	14.74
X+8	7.66	7.62	7.58	7.42	7.26	6.96	6.26	X	7.70	13.36
X+9	10.86	10.84	10.80	10.70	10.58	10.38	9.92	7.70	X	10.90
X+10	15.38	15.36	15.34	15.28	15.20	15.06	14.74	13.36	10.90	X

STARCLUSTER - CHARACTER WORKSHEET

[illegible]

CHARACTER DESIGN WORKSHEET

Mother's Milk Skills:

Initial Stats:

STR ____ COOR ____ AGY ____ END ____
 IQ ____ PSI ____ RANK ____ CHAR ____

Year by year record

Year	Employment/School	Skill Earned	Cumulative Skill	Promote?	Pay	P.D.
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
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STARCLUSTER - CHARACTER WORKSHEET

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EQUIPMENT SHEET

CLOTHING AND ARMOR

KITS

ELECTONICS

ACCESSORIES

WEAPONS

MISCELLANEOUS EQUIPMENT

VEHICLES

PERSONAL INFORMATION

Date of Birth: _____ **Place of Birth:** _____

Background: _____

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

Marital Status: _____

Spouse: _____

Children: _____

Current Residence: _____

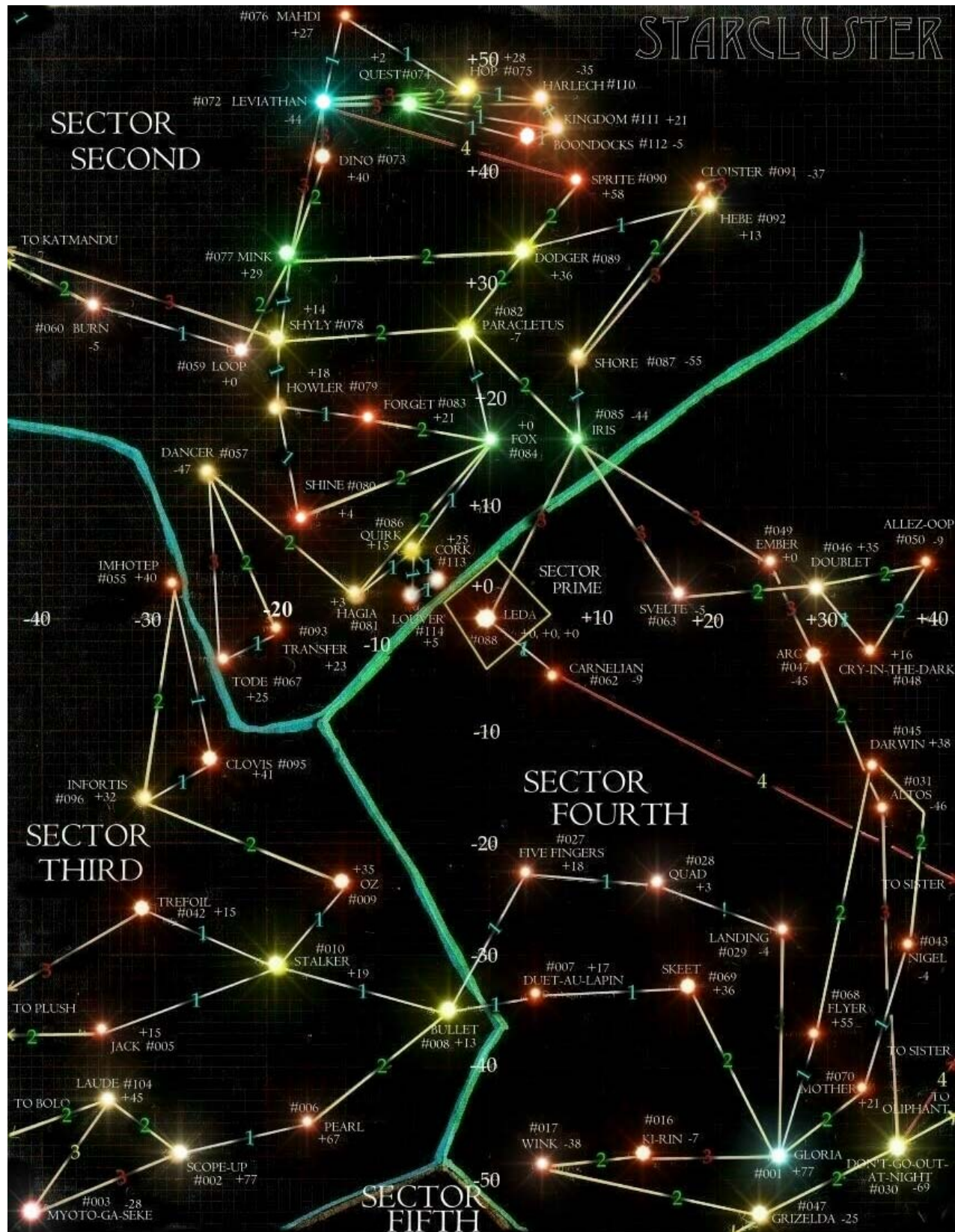
Family (siblings & parents):_____

STARCLUSTER - CLUSTER MAP: OVERALL



STARCLUSTER - MAP OF THE CLUSTER

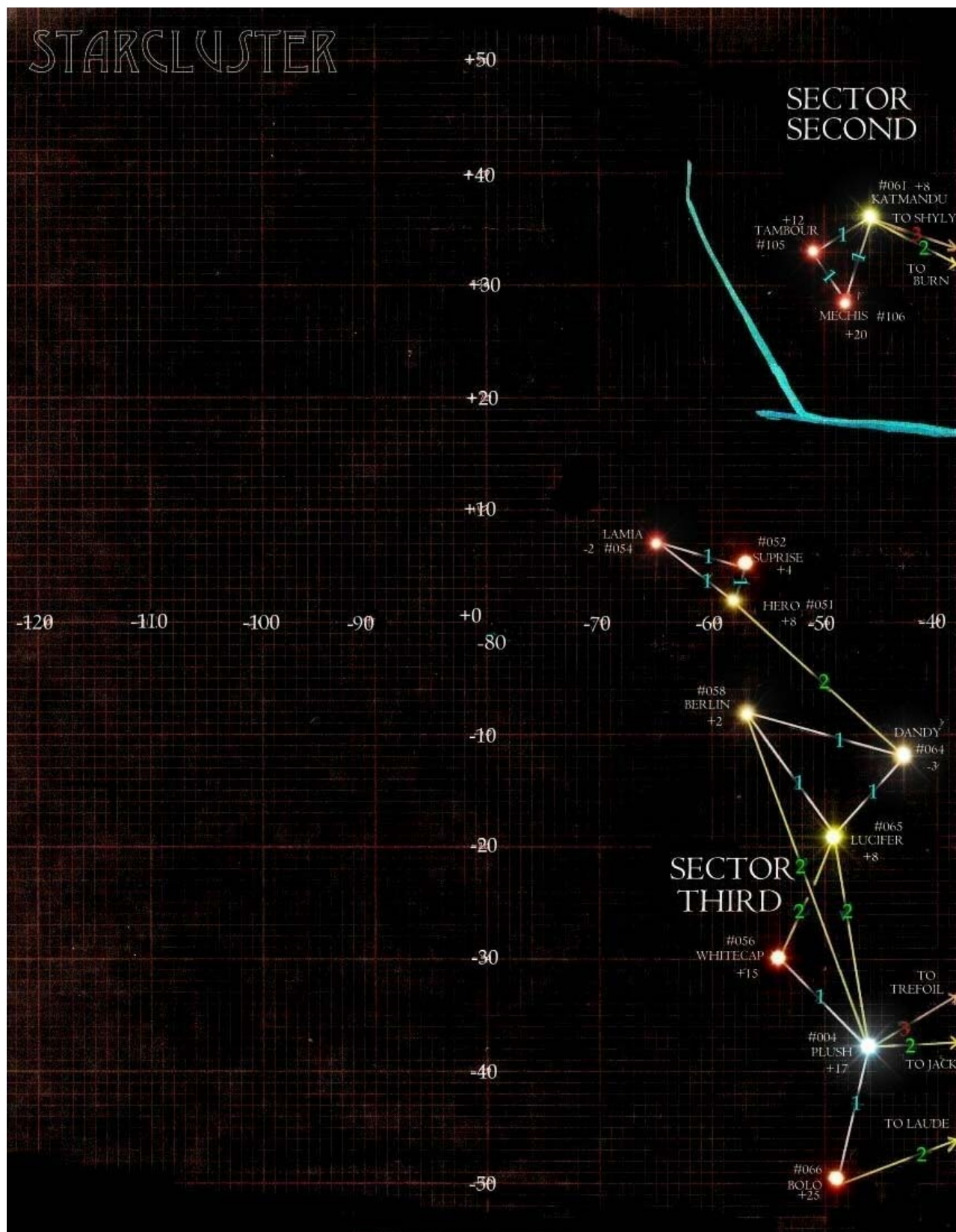
STARCLUSTER - CLUSTER MAP: CENTER



MAP OF THE CLUSTER - 135 -

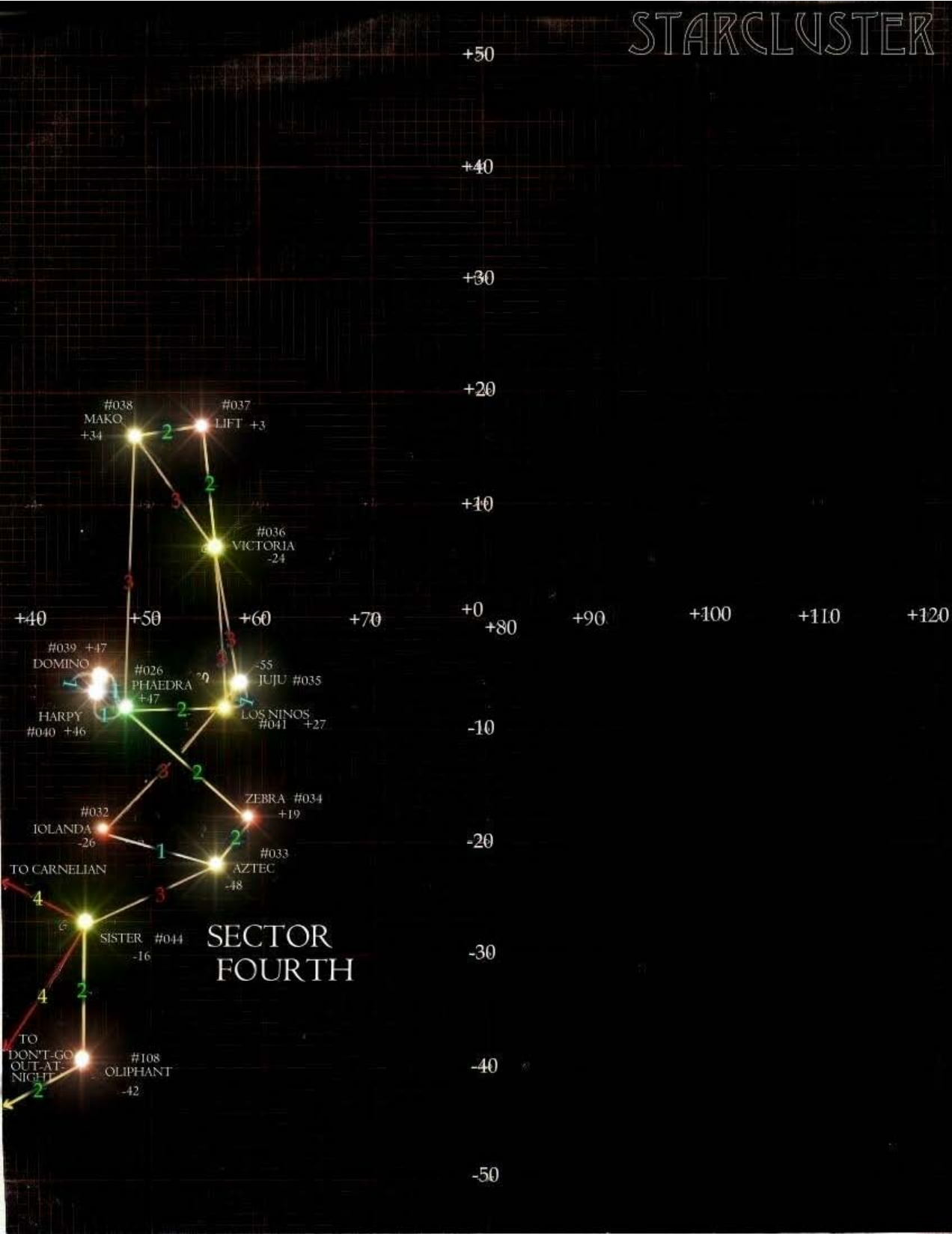
STARCLUSTER - MAP OF THE CLUSTER

STARCLUSTER - CLUSTER MAP: LEFT



STARCLUSTER - MAP OF THE CLUSTER

STARCLUSTER - CLUSTER MAP: RIGHT



STARCLUSTER - CLUSTER MAP: BOTTOM



APPENDIX A

OPTIONAL RULES

Use of these optional rules is solely at the discretion of the GM and may be dropped at any time if the GM feels the rule is detrimental to the game.

OPTIONAL RULE: SNIPING AND SINGLE SHOT KILLS

If the character wishes to snipe, and the situation and weapon is proper, sniping is possible. If the weapon has a range factor of Far or Long **and** is in the proper range for the weapon **and** the target is unaware of the presence or general position of the sniper, the sniping rules are in effect. In this case a hit is either a death blow or a wound. If the adjusted number rolled to hit is 5 or less from the maximum, but still a hit, then the target takes the normal damage from the hit X2 (double damage.) If the adjusted number rolled to hit is 10 to 6 from the maximum, but still a hit, then the target takes the normal damage from the hit X3 (triple damage). Any other hit results in the target sustaining a lethal wound.

For example: a sniper with gun+5 and coordination of 9 has a 70% chance of a hit to skin. The target is at long range and unaware of the sniper, and the gun is an autorifle. A result of 70 or less on %d is required for a hit. If the number rolled is 66-70, the target sustains double damage from the hit. If the number rolled is 61-65, the target sustains triple damage from the hit. Anything above 70 is a miss, and anything 60 or below causes instant death to the target.

Sniping brings sudden death into the combat picture. Normally, StarCluster Combat is bloody, but seldom lethal. Some GMs are loath to use sudden death on their own players. We have left the decision here up to the individual GM. If the Player characters are able to snipe, but the opponents are not able to snipe at the PCs, the GM will have to deal with what amounts to indestructible PCs. This is not necessarily a bad thing, but can drastically alter the flavor of any campaign.

Here are some possible options:

Player characters and opponents can snipe: This tends to lead to a very grim, extremely gritty feel. Players may feel very vulnerable and may refrain from sticking their characters' necks out. This is the most realistic option, in that the player characters will behave more like real people in a stressful situation.

Player characters only can snipe: This leads to a more open game. The player characters are able to snipe with impunity, but the GM can control the *conditions* for sniping. In other words, the player characters can snipe, but only when the GM says they can. This can satisfy the player need for tactical involvement but allows the GM to control things on a higher level.

OPTIONAL RULE: COMMANDO-TYPE ACTIONS

Characters may attempt commando-type actions such as picking off a sentry by clapping a hand over the sentry's mouth while slicing his neck with a knife. If the character has an appropriate background, such as infiltrator, this should be purely a question of the character's ability to sneak up on (using the sneak skill) or rush the sentry (using the dash skill), and nothing to do with weapon skill. If the sentry does not detect the approach of the character (sneak) or is unable to respond in time (dash) the sentry should die. If a character without an appropriate background attempts it, roll at sneak+0 or dash+0 as appropriate, with modifiers for agility. In any case, the sentry's constitution should be ignored.

STARCLUSTER - APPENDIX A

OPTIONAL RULE: STARCLUSTER SIMPLE VEHICLE COMBAT RULES.

These rules may replace the standard rules if less realism and quicker results are wanted. This system also scales well for use in situations of vehicles vs. people. Sides make standard initiative rolls. Side goes on its initiative. Player controlling character using the weapon rolls to-hit, with standard modifiers. Weapon factor (WF) of the weapon used must be equal to or higher than armor points (AP) to penetrate. If not, it will just bounce off.

Examples:

Heavy Machine Gun (WF 2) vs. Iron Armor factor 1 (2 AP) = penetration
Heavy Machine Gun (WF 2) vs. Iron Armor factor 2 (4 AP) = penetration
Medium Cannon (WF 20) vs. Iron Armor factor 8 (16 AP) = penetration

If weapon penetrates, roll damage. Damage is **1d10*Weapon Factor*10**. If the weapon is a burst fire weapon - such as machine guns, miniguns, gatling guns, or autocannon, damage is again multiplied by 5.

Examples:

Heavy Machine Gun damage = $2*10*5*1d10 = 100-1000$

Medium Cannon damage = $20*10*1d10 = 200-2000$

Vehicles have 100 constitution points per ton, rounded up.

Examples:

302 ton Cargo Aircraft 30,200 constitution

25 ton Armored Vehicle 2500 constitution

172 ton Boat 17,200 constitution

At its full constitution*.75, the vehicle is **Hindered**. All rolls are at -20% and max speed is *.75

At its full constitution*.50, the vehicle is **Damaged**. All rolls are at -40% and max speed is *.50

At its full constitution*.25, the vehicle is **Hammered**. All rolls are at -60% and max speed is *.25

OPTIONAL RULE: INTEGRATED COMBAT SYSTEM

The Integrated Combat System is offered as an option for those who wish a more seamless, realistic system, as opposed to the rather stylized StarCluster standard combat system.

As in the standard combat system, the chance to hit is 45% at level 1, plus 5% per each level of skill higher than +1. The Integrated Combat System is different in that all conditions are treated as straight modifiers to that basic die roll. Weapons are given a skill rating in the equipment list. The penalty for using a weapon with a skill rating higher than the character possesses is a - 5% penalty per skill level short of the skill rating.

Example:

Eugenia has blade+1 and wishes to use an arc sword, which is rated at blade+3. She is thus 2 short of the skill rating, and gets a -10 to hit with her arc sword.

STARCLUSTER - APPENDIX A

A person without sufficient skill is a danger to herself as well as the enemy. Any miss which misses the target number by more than 60 will injure the wielder.

Example

Joseph has no skill with blades but picks up an arc sword dropped on the floor during a combat. His strength is 11, so he has an 11% chance to hit with the sabre. If he rolls over 81, however, the arc sword has turned in his hand and he will wound himself.

One need not be of any particular skill level to perform two or three actions in a given round. If a character wishes to perform 2 actions in a round, they may do so provided they take a penalty on each action of -5% per level of skill below +8.

Example:

Penelope wishes to strike twice in the same round with her arc sword, and has the skill blade+3. Her normal to hit would be 55%, but she is 5 skill levels short of +8, so must pay a penalty of -25%, giving her a 30% chance to hit on each of 2 attacks.

If a character wishes to perform 3 actions in a round, they may do so provided they take a penalty on each action of -5% per level of skill below +12, Example: Penelope wishes to strike thrice in the same round with her arc sword, and has the skill blade+3. Her normal to hit would be 55%, but she is 9 skill levels short of +12, so must pay a penalty of -45%, giving her a 10% chance to hit on each of 3 attacks.

- Use of a weapon rated at a higher skill is at -5% per skill level short.
- Penalty for two actions in one round -- 5% for each skill level short of 8.
- Penalty for three actions in one round -- 5% for each skill level short of 12.
- Any miss by over 60% counts as self-injury.

Example:

A person with blade+1 uses a katana(+5):

Chance to hit = $45\% - 20\% = 25\%$

Average damage with a katana hit = 100

Average damage per round = $25\% * 100 = 25$

Chance of self-injury = 15%

A person with a blade+1 uses a shortsword(+1)

Chance to hit = 45%

Average damage with a shortsword hit = 65

Average damage per round = $45\% * 65 = 29.25$

Chance of self-injury = 0%.

The low-skilled person will have no motivation to use too difficult a weapon, but they are not penalized excessively if they find that a difficult weapon is all that is available.

STARCLUSTER - APPENDIX A

Another example:

A person with a blade+3 uses a shortsword(+1)

Average chance to hit = 60%

Average damage with a shortsword hit = 65

Average damage per round = $60\% * 65 = 39$

Chance of self-injury = 0%

A person with a blade+3 uses a katana

Average chance to hit = $60\% - 10\% = 50\%$

Average damage per katana hit = 100

Average damage per round = $50\% * 100 = 50$

Chance of self-injury = 0%

A person of intermediate skill gains little by using a high skill weapon, but they aren't penalized.

Example:

A person with blade+5 uses an arc sword(+3)

Average chance to hit = 70%

Average damage per arc sword hit = 80

Average damage per round = $70\% * 80 = 56$

Chance of self injury = 0%

A person with blade+5 uses a katana(+5)

Average chance to hit = 70%

Average damage per katana hit = 100

Average damage per round = 70

Chance of self injury = 0%

It takes a skilled fighter to get much benefit from using the katana. Multiple attacks per round become a choice that is more reasonable with advanced skill, not an ability that is suddenly achieved at a particular skill level.

Example:

A person with blade +2 makes one attack per round using a katana(+5)

Average chance to hit = $55\% - 15\% = 40\%$

Average damage per katana hit = 100

Average damage per round = 40

Chance of self-injury = 0%

A person with blade +2 makes two attacks per round using a katana(+5)

Average chance to hit = $55\% - 15\% - 30\% = 10\%$

Average damage per katana hit = 100

Average damage per round = $2 * (10\% * 100) = 20$

Chance of self-injury = 30% per strike = 51% per round

STARCLUSTER - APPENDIX A

The low-skilled individual does less damage and great risk of self-injury when choosing to make two attacks per round.

Example:

A person with blade+3 makes one attack per round using a katana(+5)

Average chance to hit = $60\% - 10\% = 50\%$

Average damage per katana hit = 100

Average damage per round = 50

Chance of self-injury = 0%

A person with a blade+3 makes two attacks per round using a katana(+5)

Average chance to hit = $60\% - 10\% - 25\% = 25\%$

Average damage per katana hit = 100

Average damage per round = $2 \times (25\% \times 100) = 50$

Chance of self-injury = 15% per strike = 27.75% per round

At skill level +3, there is no overall advantage or disadvantage in terms of damage to the enemy in using multiple strike per round, and a significant risk of self-injury.

Example:

A person with a blade+4 makes one attack per round using a katana(+5)

Average chance to hit = $65\% - 5\% = 60\%$

Average damage per katana hit = 100

Average damage per round = $60\% \times 100 = 60$

Chance of self-injury = 0%

A person with blade +4 makes two attacks per round using a katana(+5)

Average chance to hit = $65\% - 5\% - 20\% = 40\%$

Average damage per katana hit = 100

Average damage per round = $2 \times (40\% \times 100) = 80$

Chance of self-injury = 0%

At this level of proficiency, making multiple attacks per round makes sense, increasing one's effectiveness by 33%.

Example:

A person with blade+5 makes one attack per round using a katana(+5)

Average chance to hit = 70%

Average damage per katana hit = 100

Average damage per round = $70\% \times 100 = 70$

Chance of self-injury = 0%

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A person with a blade +5 makes two attacks per round using a katana(+5)

Average chance to hit = $70\% - 15\% = 55\%$

Average damage per katana hit = 100

Average damage per round = $2 \times (55\% \times 100) = 110$

Chance of self-injury = 0%

Now multiple attacks give a 58% advantage over a single attack per round.

Example:

A person with blade +6 makes one attack per round using a katana(+5)

Average chance to hit = 75%

Average damage per katana hit = 100

Average damage per round = 75

Chance of self-injury = 0%

A person with blade +6 makes two attacks per round using a katana(+5)

Average chance to hit = $75\% - 10\% = 65\%$

Average damage per katana hit = 100

Average damage per round = $2 \times (65\% \times 100) = 130$

Chance of self-injury = 0%

Now the multiple attacks have a 73% advantage over a single attack.

This method is more realistic than the standard combat system. In the standard system with its levels of mastery, going from skill+4 to skill+5 more than doubled one's effectiveness as a fighter, even though it implied only 25% more training. Now the transition is more gradual. When using this optional combat system, there might be situations where a person of low skill might choose to perform two actions per round, e.g., run to a position and fire a gun. They would have very little chance of hitting anyone, but they could get to position and make the others keep their heads down. Also, there may be times a person with a high skill might choose to make only one attack per round in difficult situations: e.g. armored opponents or at long-range.

OPTIONAL RULE: SUCCESS AND FAILURE

An unmodified roll of 00 on the percentile dice is always a failure, even if it should succeed, and an unmodified roll of 01 is always a success.

OR

If a larger guaranteed success/failure zone is required, an unmodified roll of 96-00 on the percentile dice is always a failure, even if it should succeed, and an unmodified roll of 01-05 is always a success.

OR

If playing with a d20 instead of percentile dice, an unmodified roll of 20 on the 20 sided die is always a failure, even if it should succeed, and an unmodified roll of 1 is always a success.