

Starfarer

Player's Guide

Version 0.4
Online version

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Version notes: This is a work in (admittedly slow) progress. This version (0.4) includes all of the first 5 chapters of the player guide that were included in the previous version 0.2 OL in more portable .pdf format. It additionally incorporates revisions to the character generation and combat chapters detailing the revised damage system. Future revisions will have more complete Skill and Combat chapters and a new chapter detailing templates.

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STARFARER:

Space Adventure Gaming Engine

Chapter 1: Character Generation

1.1 Basics

Starfarer is a set of gaming mechanics made for use with science fiction settings based in a universe in a fictional future of the Earth. Characters in Starfarer are described in terms of several statistics, falling into smaller categories of attributes, skills, abilities, perks, and drawbacks.

Attributes are traits that every living, sapient being has to some extent; they describe the physical and mental makeup of the character. For example, strength, charisma, and willpower are all attributes.

Skills are abilities of a character that reflect some knowledge or training the character has received, such as piloting, martial arts, or nuclear physics.

Attributes and *skills* are collectively known as *traits*, and are generally described by numbers. These numbers are on an approximate scale of 1 to 10, with 5 being considered average. For more on how attributes and skills work, see chapter 2.

Advantages describe special characteristics or aptitudes the individual may have that are not shared by all beings, and may not be easily learned or attainable. Advantages are divided into 3 major categories: *Abilities*, *Perks*, and *Psionics*.

Abilities are special enhancements or gifts the character may have that sets apart from other members of their species. If the PC is a non-human race, abilities may further encompass traits characteristic of the race that lend them some advantage over humankind; such abilities are further called *xeno-abilities*. Other abilities might be granted a member of a race via genetic engineering; these are called *geno-abilities*. A given ability might fall into any or all of these categories. Examples of abilities are acute hearing, large frame, and absolute direction.

Perks are a consequence of the character's financial, social, or political position, and could include cyberware, physical possessions (such as, perhaps, a starship), military rank, noble title, social connections and acquaintances, or simply cash in the bank.

Psionics are a special sort of skill that only certain characters have. They allow a character to perform uncanny feats that defy conventional science, such as communicating telepathically, predicting the future, viewing objects at a distance, or manipulating matter.

Finally, a character may have *flaws*. *Flaws* are negative characteristics that provide additional challenges to the character during the course of the game. Typical flaws include enemies, physical handicaps, unusual behaviors, or reputations.

1.2 Character points

A basic mechanic required for character creation is *Character Points*, or CPs. These are the “cash” with which players “buy” the attributes, skills, and abilities that the character has. More character points may be acquired to the beginning character by assigning them *Flaws*.

The GM must first make a determination about what general caliber of character he wants the characters to begin with. This is done by selecting a “proficiency level” (PL) of character, from 5 for wet-behind-the-ears youngsters, to 15 for seasoned veterans of their trade. The recommended (and assumed) starting proficiency level is 10, which is adequate for characters who are fairly young, but have some experience and training.

Once a level is determined, character points are assigned to 3 different categories, termed primary, secondary, and tertiary areas. The primary area receives ten (10) times the PL; the secondary area receives eight (8) times

the PL; tertiary receives six (6) times the PL. The following table enumerates the CP for all PLs from 5 to 20. Note that the “Tertiary Area” points are also the maximum amount of points

that can be derived from *flaws*.

The “Age modifier” is used when determining the characters’ starting age.

Table 1: Starting Character Points

Prof. Level (PL)	Primary Area CPs	Secondary Area CPs	Tertiary Area and Maximum Flaw CPs	Age Modifier
5	50	40	30	2d5
6	60	48	36	2d5
7	70	56	42	3d5
8	80	64	48	3d5
9	90	72	54	4d5
10	100	80	60	4d5
11	110	88	66	5d5
12	120	96	72	5d5
13	130	104	78	6d5
14	140	112	84	6d5
15	150	120	90	7d5
16	160	128	96	7d5
17	170	136	102	8d5
18	180	144	108	8d5
19	190	152	114	9d5
20	200	160	120	9d5

After the character points are determined, the player must assign one point total (primary, secondary, or tertiary) to attributes, one to skills, and one to advantages. The GM may require or restrict certain assignment scheme.

The conventions for buying attributes and skill levels are similar. Each level of skill costs the number of the new level of skill, assuming the character already has the preceding level of skill. As you don’t always buy one level at a time when creating a character, the following table should be of some use when determining the costs of buying more than one skill at once:

Attributes use a similar mechanism, but a new level of attribute costs DOUBLE what a new level of skill would, i.e., 2x the number of the new level, or 2x the listed cost in table 2. Characters start with 4 in all attributes for free; this is taken into account in table 2 on trait costs.

Table 2: Basic Trait Cost

Trait Level:	Trait Cost (CPs):	
	Skills	Attributes
1	1	-18
2	3	-14
3	6	-8
4	10	0
5	15	10
6	21	22
7	28	36
8	36	52
9	45	70
10	55	90

Table 2 can also be used when buying specializations or psionics. Specializations cost 2x the cost listed for skills. Psionic primary skills also cost 2x the cost listed for skills. Psionic specializations cost 3x the cost listed for skills, plus a surcharge equal to the

minimum level of the psionic skill it is based on. See section 1.4.3 for details on specialization and section 1.5.3 for details on psionics.

Table 3: Trait Improvement Cost

New Level → Current Level:	1	2	3	4	5	6	7	8	9	10
0	1	3	6	10	15	21	28	36	45	55
1	-	2	5	9	14	20	27	35	44	54
2	-	-	3	7	12	18	25	33	42	52
3	-	-	-	4	9	15	22	30	39	49
4	-	-	-	-	5	11	18	26	35	45
5	-	-	-	-	-	6	13	21	30	40
6	-	-	-	-	-	-	7	15	24	34
7	-	-	-	-	-	-	-	8	17	27
8	-	-	-	-	-	-	-	-	9	19
9	-	-	-	-	-	-	-	-	-	10

Skills use the shown cost.

Attributes, skill specializations, and primary psionic skills are *double* the listed cost.

Psionic specializations are *triple* the listed cost, plus an initial surcharge equal to the minimum psionic skill level for the specialization.

When “selling back” attributes, switch the “current” and “new” level columns; the result is the points of flaws.

1.3 Attributes

Attributes are character traits that most sapient beings share to some extent. There are 9 attributes in Starfarer, which are:

- Strength (STR)
- Endurance (END)
- Agility (AGL)
- Dexterity (DEX)
- Reason (RES)
- Willpower (WIL)
- Perception (PER)
- Charm (CHM)
- Essence (ESS)

Each of these attributes start out at a base of 4 with no cost. Using the cost scheme described in section 1.2, the player may raise any of these attributes, or may lower them to get a rebate. A summary of the cost (or rebate, if negative) is shown on the basic trait cost table (table 2).

With the GMs permission (ONLY), characters may buy attributes above 10. However, such attribute points cost 2x the normal cost for attributes (thus, raising the level of your strength from 10 to 11 would cost 2 x 2 x 11 points, or 44 points. Thus, if you wanted a starting character to start out with an 11 strength, that would cost you a total of 144

points - which is beyond the means of all but the most impressive starting characters.)

When a character “sells back” attribute points for a “rebate”, those points are counted against the character's maximum flaw total.

1.4 Skills

Skills represent the character's training and experience. A skill can include such diverse things as a character's ability to pilot a space vessel, fire an energy cannon, or treat a wound.

Just as in the case of attributes, skills are represented by a number. However, while attributes are assumed to start out at a base of 5, the same cannot be said of skills - a 5 skill is considered to be a very competent level of skill for a character who would use that skill to earn their livelihood.

1.4.1 Default skills

All characters are assumed to have undergone some rudimentary form of secondary education at the least, in addition to having picked up a number of skills that are standard for a citizen in an interstellar society at no cost in CPs. These skills are:

Native Language: 5
Vehicle (either wheeled or GE): 3
Area knowledge - home planet: 3
(specialization - home region: 2)
Computer Operation: 3

Note that you may choose to “sell back” some of these skills and get extra character points, as listed on table 2, or spend points to increase these skills, also on table 2.

1.4.2 Selecting skills

Skills may be selected from the skill list. When doing so, the player must choose the level of skill he would like to have for each skill selected. When doing so, the table 2 is used to determine the cost in CPs for that level of skill.

Some skills are defined as being

“categorical”. These are listed in bold on the skill list. When selecting such a skill, the player must choose one of the *categories* (n.b. NOT *specializations*, which are different, see section 1.4.3). For example, a character buying pilot could select “wheeled”, “GE”, etc. Skill using one such type of vehicle may or may not imply ability with other categories, but usually does not - see the section on tasks.

1.4.3 Specialization

If a character already has a skill, they may select a “specialization” within that skill. What specializations are available are listed in the skill descriptions, but the GM may create more at his whim, or possibly at the request of a player...

Specializations have 2 restrictions. First, specializations may not exceed one half (round up) of the skill they are based on. Second, specializations cost double the amount of CPs that standard skills cost.

However there are two advantages to specializations. The first is that when a task being attempted falls into the specialization, the character gets to add the specialization skill level to the level of the skill it is based on. Although the cost of a specialization is higher than that of a regular skill, the cost of buying a skill level plus a specialization is usually less than buying a standard skill of the level of the total of the two.

The second advantage of specialization is that some types of equipment or tasks suffer a penalty if you do not have the appropriate specialization. Having the specialization offsets the penalty.

Example: Dan wishes for his PC, Desiree Leetah, to be skilled in martial arts and the MLA pistol. Martial Arts normally falls under “unarmed combat”, MLA pistol normally falls under “Weapon - Pistol - Projectile”. He decides to buy level 5 in Unarmed Combat (costing 15 points), plus a level 2 specialization in a martial arts style - Judo (costing 2 x 3, or 6 points). He also buys her level 4 projectile pistol (10 CPs) and level 2 specialization in MLA pistol (2 x 3 = 6 CPs).

When Desiree fires her MLA pistol, it will be as if her skill level was 6 (4 basic level in projectile pistol, plus 2 for her specialization).

When Desiree engages in unarmed combat, it will be under her basic level of 5 unless she attempts a judo maneuver. If attempting a judo maneuver, she will do so at level 7, and the fact that she has Judo specialization will offset any negative modifier for non-proficiency.

1.4.4 Limiting Traits

All skills have *limiting traits* listed. For example any physicist is going to have to know some math; an professional gymnast must have a good agility trait. However, the detailed knowledge of a given skill tends to become more specialized at higher levels, so is less applicable to other fields, so only a portion of the *limiting trait* is required.

The skills list includes the limiting trait for each skill. If a skill has an *attribute* as a limiting trait, the character cannot have more CPs in the dependant skill than CPs that are devoted to the attribute. If the limiting trait is a skill, the character cannot have more than double (2x) the amount of CPs in the dependant skill.

1.4.5 Spending Limitations (Optional)

The GM may find that even with a relatively meager starting level, beginning characters can buy a singular very high skill level. While this may be theoretically possible in some societies, it's not too realistic in most societies. Accordingly, the GM may wish to limit the character's expenditure on any single skill to one-half that character's starting CPs in the skill area, not counting any points applied from disadvantages.

1.5 Advantages

As described earlier, *advantages* are characteristics that truly set the character apart from the norm, or (in some cases) are a

consequence of being a member of an alien race or genetically engineered subspecies. *Advantages* are divided into the subcategories of *abilities*, *perks*, and *psionics*.

1.5.1 Abilities

Abilities describe special enhancements that the character may have that cannot be simply attributed to training in most cases. Usually these represent inborn traits or special talents, such as being born large, with acute hearing, or unusual toughness. A human will usually only allocate tertiary level points to abilities, unless they have massive genetic enhancements or psionic abilities. Other races may find themselves needing to buy abilities associated with their race.

Purchasing abilities is usually much easier than purchasing skills. The skill level chart is not used; rather the character simply selects an advantage - and possibly, there may be different levels of the same advantage - and pays the listed amount of CPs.

However, there are some restrictions. *Standard abilities* can be purchased by most characters at this point. *Xeno-abilities* can usually only be bought as part of an alien race template; *Geno-abilities* can usually be bought as part of a genetic subspecies template. Many abilities in the *abilities* list fit more than one of these categories; such *abilities* may be bought as part of the appropriate template, or normally during the character creation process. See section 1.9 on *templates* for more information

1.5.2 Perks

Perks are special benefits that the character enjoys, and includes such things as contacts, wealth, material possessions, military rank, noble titles, and cybergear.

Perks are much like abilities in that they are easy to purchase. Simply choose a perk from the list of perks, and pay the associated cost in CPs. Cyberwear also required a negative essence modification that must be noted as well.

1.5.3 Psionics

Note: Psionic abilities are not universally embraced by the SF community. Many SF writers and fans (the author included) feel that psionic abilities are apocryphal at best. However, psionics play a major part in many SF settings (e.g., Frank Herbert's DUNE) and I would be remiss in excluding them in an RPG that hopes to emulate a variety of science fiction settings. Accordingly, the following rules should be used (or altered) at the GM's discretion.

Psionics are special aptitudes and skills in those aptitudes, allowing the user to perform seemingly inexplicable feats by merely concentrating. Psionic abilities are treated similar to skills, with a few exceptions.

There are only a few psionic skills, being *telepathy*, *extrasensory*, *psychokinesis*, *psychometabolism*, and *antipsionics*. These are called *primary psionics*. These skills are bought in the same manner as normal skills, at double the cost.

Primary psionics are almost useless by themselves. The psionic character must also buy one or more *psionic specializations* in order to utilize their psionic skills. These *psionic specializations* are listed in the appendix. Unlike normal specializations, *psionic specializations* cannot normally be attempted if the character does not have the attendant specialization. In addition, *psionic specializations* have a minimum level in the related *primary psionic* required to take that specialization. Purchasing a *psionic specialization* costs 3x the cost of a normal skill, *plus* a number of CPs equal to the minimum level required in the *primary psionic*.

Example: John wishes for his character, Drexel, to have the psionic specialization *weapon bond*. This is a specialization under the primary psionic skill *psychometabolics*. The minimum level in *psychometabolics* for the *weapon bond* specialization is 4. John must buy at least 4 levels of *psychometabolics*; John chooses to buy 5. It cost 15 points to buy a level 5 skill normally, so it costs 30 points to buy the level 5 *psychometabolics*. Now, he wants at least 3 levels in the *weapon bond* skill (the

maximum he can buy with level 5 in the skill it is based on.) The normal cost for a level 3 skill is 6 points. It costs 3 times this, plus the minimum level (4) for the specialization, for a total of 22 points.

The total cost for these skills is 52 points-- 30 points for the level 5 *psychometabolics*, plus 22 points for level 3 in *weapon bond*.

1.6 Flaws

You will frequently find yourself wanting a few more points to bump a skill or attribute up or afford an expensive ability or perk. The solution to this situation is to voluntarily take one of more *flaws*. But points aren't the only reason to select *flaws* - player frequently find it more interesting to play a character that has a few *flaws*.

Flaws can include such things as physical aberrations, psychological conditions or hangups, enemies, and poverty. Selecting *flaws* is somewhat similar to selecting abilities and perks, but instead of PAYING the listed CPs, each flaw has a CP value that the character can spend on any of their other categories.

There is only one limitation on spending CPs from *flaws*--the character cannot spend more points on their secondary area than their primary area or attributes, nor can a character have more points in their tertiary area than their secondary area.

1.7 Leftover points and karma

If you have a few points left over, you have 2 options for how to dispose of them:

First, you may bank them on skills. You may transfer up to 5 points from any category to your skill category, and distribute those between any skills you have. While having an intermediate number of CPs from those listed on table 2 will not immediately raise a skill level, you may use experience during the game to raise a skill, and already having invested a few points will make it easier to advance the skill during the game.

The other option is that you may add

leftover points in your *Karma* pool. All characters have a *Karma Limit* of 2x their modified *Essence* attribute. All characters start out with *Karma* points equal to their *Karma Limit* cross referenced on table 2. Any leftover CPs may also be added to the *Karma* total, but the *Karma* pool may never be greater than the *Karma Limit*.

Example: Dan has finished his character, Desiree Leehtah, and has 5 points leftover. Desiree's *Essence* is a base of 5, but due to cyberware penalties, Desiree's *Essence* has a -3 modifier, giving Desiree a modified *essence* of 2. Desiree's *Karma Limit* is only 4 (2x Desiree's modified *Essence*). On table 2, having a 4 *Karma Limit* only gives Desiree only 2 points in her *Karma* pool, so Dan can only put 2 CPs into the *Karma* pool, for a total of 4. The remaining 3 points must be put in skills. he devotes these CPs to Desiree's projectile pistol skill, which already has 10 points (level 5) in it. Now it has 13 CPs in it, and as soon as he can put 2 more points in it (for a total of 15), his skill will raise to a level of 5 - but that will take a few adventures...

1.8 Figured attributes

After you are done buying everything, there are a few attributes that are used for various mechanics during the game that must be figured.

1.8.1 The Simple Stuff

Can you add a few numbers together? If so, then you're almost done! The remaining *derived attributes* are just a sum of existing attributes. Where division occurs, (U) means round any fractions up to the nearest whole number, (D) means drop any fractions, and (N) means round normally (i.e., round up if the fraction is .5 or greater, otherwise round down.):

Mass: $\text{Size Mod} + 6$ (thus most humans are mass 6).

Karma Limit: $2 \times \text{Essence}$ (discussed in section 1.7).

Resilience: $\text{Mass} + (\text{Mstr} + \text{End})/3$ (U).

Initiative: $(\text{Dex} + \text{Agl} + \text{Per})/2$ (U).

Stun Limit: $(\text{End} + \text{Wil})/2$ (U).

Shock Potential: $\text{Mass} + (\text{Mstr} + \text{Wil} + \text{End})/2$
(Retain Fractions)

Move bonus: $\text{End} + \text{Agl} + \text{Move Skill}$, on cost chart.

Walking: $\frac{1}{2} \text{Mass} + \frac{1}{2} \times \text{Move Bonus}$.

Running: $\frac{1}{2} \text{Mass} + 4 \times \text{Move Bonus}$.

Sprinting: $\frac{1}{2} \text{Mass} + 7 \times \text{Move Bonus}$.

Encumbrance: $2 \times \text{Mass} + \text{UStr}$

Starting Age: $13 + \text{Age modifier} + \text{age mod}$ from multiple templates. See table (This may be different if you take the "Age" disadvantage or "prodigy" advantage).

1.8.2 Damage Scales

Each character has 2 damage scales; one is for wounds to specific body areas, one is for shock damage summarizing the effects of all damage to the body. The scales divide damage into categories: graze, light, medium, heavy, severe, deadly/destroy, abbreviated G, L, M, H, S, and D, respectively. The "D" category is "deadly" if the wound is to a vital area or shock damage, or "destroy" if the wound is to a limb. In addition, there is a "D+" category, which is considered identical to the "D" category, except that there are no task checks allowed to save against negative effects of such a wound. Usually this means death of the character if the wound is to a vital area or shock damage total, or maiming or removal of a limb if the wound is to an extremity.

The wound damage scale is determined by referencing the following table using the character's mass as the "base" number. Then the shock damage scale is determined by referencing the following table using the character's shock potential as the "base" number.

Wound / Shock Scale Chart

Base:	Category:							Base:	Category:						
	G	L	M	H	S	D	D+		G	L	M	H	S	D	D+
4	1	3	4	6	10	16	25	13	1	8	13	21	33	52	82
4.5	1	3	5	7	11	18	28	13.5	1	9	14	21	34	54	85
5	1	3	5	8	13	20	32	14	1	9	14	22	35	56	88
5.5	1	3	6	9	14	22	35	14.5	1	9	15	23	36	58	91
6	1	4	6	10	15	24	38	15	1	9	15	24	38	60	95
6.5	1	4	7	10	16	26	41	15.5	1	10	16	25	39	62	98
7	1	4	7	11	18	28	44	16	1	10	16	25	40	64	101
7.5	1	5	8	12	19	30	47	16.5	1	10	17	26	41	66	104
8	1	5	8	13	20	32	50	17	1	11	17	27	43	68	107
8.5	1	5	9	13	21	34	54	17.5	1	11	18	28	44	70	110
9	1	6	9	14	23	36	57	18	1	11	18	29	45	72	114
9.5	1	6	10	15	24	38	60	18.5	1	12	19	29	46	74	117
10	1	6	10	16	25	40	63	19	1	12	19	30	48	76	120
10.5	1	7	11	17	26	42	66	19.5	1	12	20	31	49	78	123
11	1	7	11	17	28	44	69	20	1	13	20	32	50	80	126
11.5	1	7	12	18	29	46	73	20.5	1	13	21	32	51	82	129
12	1	8	12	19	30	48	76	21	1	13	21	33	53	84	133
12.5	1	8	13	20	31	50	79	21.5	1	14	22	34	54	86	136

The above table covers most possible wound and shock potentials available to characters with a standard amount of starting points. If the character's mass or shock do not fall on this table, or if you simply prefer using formulae to tables, the following formulas can be used to determine the numbers for each category:

- G: 1 (always).
- L: (SP or Mass) x .631 (N)
- M: (SP or Mass) (N)
- H: (SP or Mass) x 1.585 (N)
- S: (SP or Mass) x 2.512 (N)
- D: (SP or Mass) x 3.981 (N)
- D+:(SP or Mass) x 6.310 (N)

These correspond to the doubled standard scale (see chapter 2 and the GM's Guide). Note that for some aliens, the above numbers will not be the same for all body parts, but for humans, they are.

1.9 Templates (Optional)

At the GM's option, characters may be allowed to (or even *required* to) use number of *templates* (or even make up his own, suitable to the game he is running). These offer packages of *skills*, *attributes*, *advantages* and *flaws* that are consistent with a given character archetype, as well as describing special abilities unique to certain alien races. The GM may use such templates to either enforce some guidelines on skills the characters have (for example, if the adventure is a military expedition by the Coalition, the characters might all be required to take the "Coalition Marine" template) or simply to give the characters some direction.

A player selecting a template for their PC should write down all *attributes*, *skills*, *advantages*, and *flaws* listed in the template down along with the cost for each category. Then, there is a *template bonus*. This bonus is treated as a *flaw* (basically, you get a kickback for abiding by the strictures of the template).

Note these “bonus” points DO count against your maximum number of points from *flaws*.

Note that in the case of *attributes* and *skills*, these *traits* are given in terms of CPs; this is because those who take multiple *templates* (such as in the case of aliens) must abide by the ballooning cost scheme. For example, if you take a template that gives you 3 CPs in energy pistol, that would give you a skill level of 2 in energy pistol. If you take a second template with 3 CPs in energy pistol, that gives you a total of 6 CPs (i.e. level 3) in energy pistol, NOT level 4 in energy pistol.

Templates are divided into *race* (including *xeno-* or *geno-*) *templates* and *archetype templates*. You may normally only take one *race template* (or, rarely, one *xeno-* and one *geno-template*), but may normally accompany this with an *Archetype template*. You may take more than one *archetype template* if the GM (and the number of points you have) allows, but there may be an age requirement. For the first *archetype template*, if the template “age modifier” is higher than the starting PL, use the age modifier number instead of PL when determining starting age (see section 1.8.3.)

If a second, or “supplemental” *archetype template* is taken, add the bonus to your starting age. Also, note that you don’t get points for the “Age” *flaw* for this - that’s part of the price you pay for getting the *template* bonus.

1.9.1 Designing new templates

The GM (or, at the GMs option, a player) may design new *templates*. If a player is allowed to design a *template*, it should not be considered a normal part of the character generation sequence, and the template should be usable for more than just that one character. And, of course, the GM has final say on the validity of any *template*.

The first step is to choose a number of *attribute* improvements, *skills*, *advantages* and *flaws* appropriate to the kit concept. Some of the traits may be chosen from a short list

included in the *template* description (usually having 5 or less items). The costs for all selected characteristics is shown, and added up in each category - this makes it easy to apply the template to a character.

Then, the template bonus must be determined. Add up all categories except *flaws*. Cross reference the total against the “0” row of table 3; the result is the *age modifier*. If the template has no *flaws*, this number is also the *template bonus* and at this point you are done.

If the template does have *flaws*, add together all the flaw CPs (not including the template bonus, of course.) Cross reference this number with row 0 of table 2; the result is added to the *age modifier* to find the actual *template bonus*.

1.10 A note on character generation

Starfarer is a role-playing game, not a study course for budding accountants. While a fair amount of accounting goes on during generation, most of this goes away during the role-playing game.

What does this mean to you, the gamer? When you receive CPs during the game, they are part of “experience points”. While you may use this to gradually improve your character, you do not balance CPs during the game whenever some bit of information about your character changes. For example, if you get your arm chopped off or earn the ire of a corporate exec, you don’t spontaneously get CPs for “physical limitation” or “enemy”. But on the bright side, if you finagle your way into something good, like winning the smuggling ship “Centurian Eagle” in a game of trichip, or arrange the downfall of your powerful corp exec enemy, then you don’t have to cough up the CPs at that time.

Character generation rules are for GENERATING characters; there are some slightly different rules for experience. ‘Nuff said.

Chapter 2: Skill Mechanics and Task Resolution

2.1 Definitions

The following are some basic definitions which may be helpful when navigating the task system - all told, the task system is pretty straightforward, but to utilize it in its whole, understanding these terms will make the “task” a little easier

Appropriate Traits: A list of traits (usually 2) that are to be used when determining the BCS for a given task.

Automatic Failure Level (AFL): Percentile number at or above which failure is automatic, regardless of the character’s trait levels.

Base Chance of Success (BCS): Usually derived from the sum of the 2 *Appropriate Traits*. BCS is multiplied by the *Ease Factor* of a task to determine the roll needed to succeed.

Ease Factor(EF): Factor that determines the ease of success for a simple task. Ease factor is multiplied by base chance of success (BCS) to determine the basic percentile number (or less) needed to succeed in a simple task. The higher the Ease Factor of a task, the easier it is to perform in general.

Ease Modifiers (EM): Bonuses or penalties applied to the *Ease Factor (EF)* of a task due to the situation at hand.

Goal: Part of the *Task Profile*, the *Goal* describes the basic objective that will be achieved if the character succeeds in the task.

Modified Chance of Success (MCS): The number or less that a player must roll on d% to succeed at a task. This number is usually found by multiplying the *Basic Chance of Success (BCS)* by the *Ease Factor (EF)*.

Simple Task: A task in which it is only important to determine whether the attempted action succeeds or fails; determining how well the character succeeds or fails is not important.

Success-based task: Task in which the margin by which the character succeeds or fails is

important in determining the actual outcome of the task.

Success level, or Level of Success (LOS): Determined when performing a success-based task, *LOS* describes how well the character succeeded is the task beyond achieving the minimum goal of the task.

Task: A challenge presented to the character during the game. The chance of resolving a task is based on the characters’ skills and attributes; success or failure at the task is determined by a dice roll.

Task Profile: A format that tasks are written in that gathers all the needed information about the task in one location for easy reference.

Trait: Term encompassing the Attributes and Skills of the character. Traits are used in determining the chance of success at a skill.

2.2 Simple Tasks

A “simple” task does not refer to how easy the task is to perform for the character. A simple task is merely the basic type of task in Starfarer, in which it is only determined whether the character succeeded or failed; it is not important to determine how well the character succeeded or failed.

Tasks are written in a uniform format that gathers all the needed information in one place. An example of a simple task might be as follows:

To notice that the briefcases have been switched:
(Perception, Surveillance), x3
GM: Hidden roll.

You will notice that this seems fairly straightforward, but we’ll break it down for you for future reference:

The first box is called the “header”, it contains only the *goal* of the task.

“To notice that the briefcase has been switched” - this, the “Header” of the task, is

called the *goal*. The goal describes, in simple terms, what the task will accomplish if successful in combat.

The second box is the "Probability box".

"(Perception, Surveillance)," - These are the *Appropriate traits*. Usually there will be 2 traits listed here; simply add up the values of the appropriate traits to determine the character's BCS for this task.

"x3" - This is the *Ease Factor* term.

Multiply this number by the *BCS* to find the character's chance to succeed at this task (also called *MCS*), expressed as a percentile.

Any other boxes (in this case, only 1) are "Information boxes." Information boxes give information on modifying and interpreting the task. In this case, the phrase "GM: Hidden roll" lets the GM know that he should roll the result without informing the players of the reason the roll is being made. If the roll is successful, the GM will tell the character(s) what they noticed.

This "profile" may seem very formal, and somewhat unnecessary, and to a certain extent it is. For the most part, tasks are easy enough for a competent GM to make up on the fly. However, some success based tasks have many possible modifiers and potential results, and the profile helps keep everything straight (such as in the case of combat tasks, as will be seen). Utilizing task profiles allows the GM to introduce a higher level of detail into the action of the game, if needed.

2.2.1 Simple Task Resolution

To determine whether a character is successful at a task, multiply the BCS by the Ease Factor (EF) to find the modified chance of success (MCS). Then roll percentile dice. If the roll is LESS THAN OR EQUAL TO the MCS, then the task is successful. If the percentile roll is GREATER THAN the MCS, then the character has failed at the task.

Example: Jacob Thunder is attempting the above task. It just so happens that Jacob is a recon specialist, and has a Perception attribute of 6, and has a surveillance skill of 3. His BCS for this task is (6 + 3), or 9, and so he has a modified chance of (9 x 3) or 27% to notice that a particular pair of briefcases have been switched. The DM

rolls the dice for Jacob (normally, Jacob's player would roll the dice for him, but in this case, the roll is hidden, so the DM rolls) and come up 44, so Jacob is oblivious to the fact that the 2 briefcases of concern have been switched.

2.2.2 The Success Table

On each character is a Success Table. Basically, it is a multiplication table with some game terminology notes in the periphery. This table is placed conveniently to help speed play during the game, and is duplicated in Table 2.1.

The number shown in the table is the *Modified Chance of Success (MCS)*, the number that must be rolled for the task to succeed.

2.2.3 Automatic failure

You will note that a combination of high ease factors and high applicable traits will produce a very high chance of succeeding - according to the success table over 100%. However, regardless of how high one's traits are, the GM should impose a small chance of failure.

By the automatic failure rule, the *Automatic Failure Level* of any task is equal to 90 plus the EF of the task - treating all EFs of less than 1 as 0 (Note that you should never have to impose the *Automatic Failure Level* for Tasks with an EF of less than zero, but under the more advanced success based tasks, this does serve a function.) This gives a number between 90 and 100. If the percentile roll for success is greater than the AFL for the task, the task automatically fails, regardless of what MCS is indicated.

2.2.4 Selecting Ease Factors

Note that the ease factor 5 column of the success table is bold. This represents a task of moderate difficulty that a competent, talented professional (total BCS 10) has around a 50% chance to succeed at. Similarly, relatively easy tasks, such as an EF x10, would automatically succeed for the same person.

Conversely, an EF 1 or ½ task is extremely challenging, even for a very talented individual. Levels 2 through 4 represent medians, that are very challenging for a modest character, but less so for a highly skilled character.

The GM may select the level of difficulty of a variety of such tasks on the fly with a relative amount of ease. The GM may also designate some standard tasks and assign modifiers for adverse (or favorable) conditions as he sees fit. For example, the GM may have decided ahead of time, that piloting a gunboat through a

narrow trench safely would have an EF of 5. But if the players, being the unpredictable entities that they are, decide to try piloting their starship down the trench instead, this would incur a negative ease modifier as piloting a massive starship in confined quarters is significantly more difficult than piloting a lowly gunboat. If the GM imposes a -2 EM to the task, the effective EF of the task would be 3. But maneuvering a small, agile hoverbike down the trench may be a cinch - the DM might grant a +2 for such an attempt, giving an effective EF of 7 for the task.

Table 2.1 Success Table:

BCS:	Ease Factor										
	½	1	2	3	4	5	6	7	8	9	10
2	1	2	4	6	8	10	12	14	16	18	20
3	2	3	6	9	12	15	18	21	24	27	30
4	2	4	8	12	16	20	24	28	32	36	40
5	3	5	10	15	20	25	30	35	40	45	50
6	3	6	12	18	24	30	36	42	48	54	60
7	4	7	14	21	28	35	42	49	56	63	70
8	4	8	16	24	32	40	48	56	64	72	80
9	5	9	18	27	36	45	54	63	72	81	90
10	5	10	20	30	40	50	60	70	80	90	100
11	6	11	22	33	44	55	66	77	88	99	110
12	6	12	24	36	48	60	72	84	96	108	120
13	7	13	26	39	52	65	78	91	104	117	130
14	7	14	28	42	56	70	84	98	112	126	140
15	8	15	30	45	60	75	90	105	120	135	150
16	8	16	32	48	64	80	96	112	128	144	160
17	9	17	34	51	68	85	102	119	136	153	170
18	9	18	36	54	72	90	108	126	144	162	180
19	10	19	38	57	76	95	114	133	152	171	190
20	10	20	40	60	80	100	120	140	160	180	200
21	11	21	42	63	84	105	126	147	168	189	210
22	11	22	44	66	88	110	132	154	176	198	220
23	12	23	46	69	92	115	138	161	184	207	230
24	12	24	48	72	96	120	144	168	192	216	240
25	13	25	50	75	100	125	150	175	200	225	250
26	13	26	52	78	104	130	156	182	208	234	260
27	14	27	54	81	108	135	162	189	216	243	270
28	14	28	56	84	112	140	168	196	224	252	280
29	15	29	58	87	116	145	174	203	232	261	290
30	15	30	60	90	120	150	180	210	240	270	300

2.2.5 High ease factors and automatic tasks

The GM may wish to assign ease factors greater than 10 for routine tasks, in which case, the only role that difference in traits play will

usually be time it takes to complete the task. Usually, it is best assumed that for any task with a EF greater than 10, completion of the task is automatic provided that the character has the appropriate skills to complete the task.

2.2.6 Low ease factors (Optional)

Modifiers to ease factors are usually expressed as a positive or negative number (e.g., +1, -2). Any modifier that takes the EF to less than one should be treated as modifying the EF to $\frac{1}{2}$.

The GM may find it desirable to use very low ease factors. For this purpose, each successive EF below $\frac{1}{2}$ is obtained by subtracting 1 from the value of MCS given on the success table for $\frac{1}{2}$. Thus if a character with a task BCS of 10 was attempting an EF 1 task with a -2 ease modifier, the total EF is -1. The character would need to roll a 4 or less on d% to succeed (for EF that is modified to "0", the character would need $\frac{1}{2}$ of their BCS, for and MCS is 5. For the modified EF of -1, the required roll is the same as the EF $\frac{1}{2}$, or 5, minus one, for a total of 4.) For the purposes of label, EF $\frac{1}{2}$ would be equivalent to "EF 0", and each smaller EF is labeled by its negative magnitude, i.e. "EF -1", "EF -2", etc.

2.3 Success-based Tasks

Sometimes, whether you succeeded or failed at an attempted task is not the only relevant outcome of the task - sometimes it is important to know more. As an example, just knowing that you hit your enemy will not be enough information to know exactly what happened. You must also know HOW WELL you hit the enemy.

This is accomplished through the use of *Success-based Tasks*. The basic concept is that by examining the dice roll compared to the character's BCS, you can determine the resulting *Success level* (also called *Level of Success*, or *LOS*.)

2.3.1 Basic concepts

When determining a *Success-based Task*, you will have to find your characters BCS for that task and roll percentile dice. But unlike simple tasks, you are not shooting for just one number that you must roll equal to or less than. Generally speaking, the lower you roll, the better.

When resolving a *Success-based Task*, you must determine the *Modified Chance of Success* as you do for a simple task (i.e., by multiplying *Ease Factor* by *BCS*.) Just as in simple tasks, modifiers may be applied to the *Ease Factor* and *BCS*.

If roll greater than the *Modified Chance of Success*, then you have failed at the task. If you roll less than or equal to the *Modified Chance of Success*, you have succeeded at the task and must find the *Level of Success*.

2.3.2 Generating Levels of Success (LOS)

To generate a *Level of Success*, determine the BCS of the task as for simple tasks. Then roll percentile dice. Consult the row corresponding to the task BCS on the success table, and count the number of results that are both *less than the MCS* and *greater than or equal to the percentile roll*. The number of such results is the *Level of Success*. You can also do this simply by putting your finger on the *MCS* on the row corresponding to the *BCS*. Then, moving right, count one for each column, stopping at the first number *less than* the number rolled on d%.

If you succeeded in the task but failed to roll low enough that your roll is less than any numbers in the columns to the left of the *MCS*, then you still succeeded, but your *LOS* is zero. This is called a *marginal success*. Such a result means that you succeeded in the task, but did not do anything beyond the basic *goal* of the task.

Example: Kitai Kurugumi, an intelligence agent for the Orchid Gunner mercenary unit, is firing a laser pistol at an opponent. He has a skill of 5 with the laser pistol, and a dexterity of 7, giving him a BCS of 12 for the task. The task has an *Ease Factor* of 5 at this range with a laser pistol, but the GM

imposes a *Ease Factor* modifier of -1 due to darkness, thus the modified *EF* for this task is 4. This makes the *MCS* of this task 48 (4 x 12 = 48) Kurugumi's player rolls d% and comes up with a 23. He cross-references table on the row on which the *BCS* is 12. Two numbers (36 and 24) on that row of the table are less than the *MCS* (48) and greater than or equal to the dice roll (23). Thus, the resultant *LOS* is two.

2.3.3 Interpreting LOS

The GM should feel free to interpret the meaning of various *LOS*s. However, if a frequently used task is being developed for use in the game, the *LOS*s should be listed in an information box with the task writeup.

Note that results with a Level of Success of 0 is also termed "marginal successes", and usually represent the minimum result that fit the description of the desired goal. For example, in the combat system, a *LOS* 0 hit is called a "marginal hit" and results in a minimal amount of damage.

2.3.4 Negative Success Levels

Though the usual use of *Success-based Tasks* is to determine how well a character succeeded, the GM may also use the negative *LOS* number to determine *how bad the character failed!* However, unless the task is particularly hazardous, negative effects should be resigned to larger negative numbers - usually, it should take a *LOS* of -2 to -5 for any significant negative effect (other than failing to achieve the desired goal) to take effect.

To find negative *Levels of Success*, count each result on the row corresponding to the *BCS* that is *greater than* the *MCS* and *less than or equal to* the percentile roll.

2.3.5 Extremely high *LOS*s (optional)

Occasionally a player will roll a nice, low number - like 01 - that the GM may rule as being a truly exceptional success. One way to handle this is that if the d% roll for the task is

less than ½ of the *BCS* (which is the leftmost column on the table), then the character gets the *LOS* equal to that they would have received if they rolled exactly ½ the *BCS*, *plus* an additional +1 *LOS* for each point the roll is less than ½ the *BCS*.

Example: Lance Detwiller is piloting his speeder bike to avoid enemy fire. The appropriate attributes for this task are his *Dex*, which is 6 and *Pilot: Atmospheric*, which is 4. This gives him a *BCS* of 10. The *EF* of the task is 5. Lance's player rolls the dice for the task and rolls an 02! For a *BCS* of 10, this is less than the 5 he would need to succeed at an *EF* ½ task. Rolling a 5 would give Lance a *LOS* of 4 on this task, plus the roll of 2 is 3 less than the 5 needed for a +4 *LOS*, so his total *LOS* is +7 (the basic +4, plus 1 more for each 1% rolled under the ½ *BCS* threshold).

2.3.6 Automatic failures and Low *LOS*s

Automatic Failure Level is used for *Success-based Tasks* in the same way as for simple tasks (see section 2.2.3.) However, if the GM is keeping track of failure levels for the task, the following rules apply.

The *LOS* of a task for which the dice roll is equal to or greater than the *AFL* is equal to the normally determined *LOS* of the task minus one for each point the roll is over the *AFL*, with a maximum value of -1.

Example: Two scientists are researching the ruins of an ancient civilization and are trying to determine the cause of their demise. The appropriate traits are *Reason* and *Archeology*. The first scientist has 9 res and 9 skill, for a *BCS* of 18. The second has 6 res and 6 skill for a total of 12 *BCS*. The task has an *EF* of 7, and thus a *AFL* of 97.

Scientist 1 rolls d% and gets a 97. The *MCS* for this task is 126. Ignoring the automatic failure rule, this would normally give him a *LOS* of 1, which would normally be considered successful. However, the

roll was at or above the *Automatic Failure Level*, the *LOS* is lowered to -1, which is considered a failure, but just barely. Scientist 1 is baffled, but nothing bad comes about because of it.

Scientist 2 also rolls d% and rolls a 99! His MCS for this task is 84. This would normally give him a *LOS* of -2, which is bad enough, but he also subtracts an additional 2 because he rolled 2 more percentage points over the *AFL*. His final *LOS* is -4! Not only does he not have a clue concerning what caused the demise of the civilization, he comes to a conclusion that is totally wrong!

2.3.7 Mechanical Failures

You may want to define some failures that are strictly independent of trait levels, such as mechanical failures. In this case, do not use the determined negative *LOS* level to decide what undesirable effect is inflicted on the

character or equipment; instead, if a percentile roll is made that is greater than the pre-defined failure level, ignore the *LOS* and impose a mechanical failure.

The percentage roll needed to impose a mechanical failure should be at least equal to the *AFL*. Typically, most modern mechanical devices fail rarely, and it is appropriate to only institute a mechanical failure on a d% roll of "00", or perhaps on a lower number if the equipment is old, poorly designed, or poorly maintained. As a guideline, add an additional percentage point to the spread required for mechanical failure for each of these factors.

Example: Operating equipment on a new, well maintained, well designed ship would only result in a mechanical failure on a "00" (if at that!). If the ship was old, missed a scheduled overhaul, and was a hunk of junk to begin with, any operational task resulting in a d% roll of 97 or more might result in mechanical failure.

Chapter 3: Personal Combat

3.1 Basics

Many of you trigger-happy space marine wanna-bes out there may have flipped past chapter 2 on basic tasks because you were too eager to learn how to kill things in Starfarer. If this describes you, then GO BACK. The whole combat system is intimately dependant on the task system.

That said, for those of you who have already read the chapter on tasks, we may continue with a list of definitions to make your journey through the combat system a little easier:

<continue>

3.2 Time and Initiative

The Starfarer combat system is based around 6 second combat rounds. This is sufficient to allow the players to embark on some fairly complex tasks while allowing the action to proceed at a realistic pace. This also conveniently divides each minute into 10 combat rounds.

When you roll for initiative, roll a 1d10 and add the *Initiative* statistic. This is your *Action Point* total for the round.

For each 10 full *Action Points*, you get an *Action Phase* during that round. An *Action Phase* is the amount of time that the character may take a combat action without penalties. You may attempt multiple actions during an *Action Phase*, but incur a penalty for each action past the first (See Section 3.2.1.)

Characters resolve their actions in order of their action points, counting down. When you take an action phase, you subtract 10 from your action point total. You may take another action phase this combat round if you have 10 or more points left. If you do not have ten *Action Points* left, you do not take any further action phases during the round, but you add any action points you have left next round.

Example: Three characters (we'll name A, B, and C) initiate combat. They have initiative scores of 12, 9, and 7

respectively. A rolls 9 for initiative, so has 21 action points this round. B rolls a 5 for initiative, so has 14 action points this round. C rolls a 2 for initiative, so has 9 action points this round.

A takes the first action on 21. He resolves the action phase and subtracts 10 from the total, leaving him with 11 action points. B takes the second action on 14. He resolves his action phase and subtracts 10 from his action points, for a total of 4. A takes a second action on 11. He resolves his action phase and subtracts 10 from his action points, leaving 1.

The combat round ends, as there are no characters left with 10 or more action points left.

Next round, character A adds 1 to his initiative, character B adds 4 to their initiative, and character C adds 9. Note that character C didn't get a chance to act this round, but with a +9 on his initiative next round, he will likely act first next round.

3.2.1 Action Declaration (optional)

Normally, a player may declare what action they want to take during an action phase when the time comes to resolve that action phase. However, if the GM is using initiative modifiers (section 3.2.2) or multiple actions (section 3.2.3), a character must declare their next action ahead of time, except as described in the abort action (see 3.2.4)

Under the action declaration rule, if a player wants their character to do a specific action in the next phase, they must declare that action either before initiative is rolled, or at the end of the preceding action phase.

3.2.2 Initiative modifiers

(optional)

Normally, most actions are considered to have an initiative modifier of “0.” This means that whatever you roll on your *action point total* is used to determine when you take your action phases.

However, some actions (such as some weapons) have an *initiative modifier*. This typically ranges from +3 to -3. When a player declares an action (see 3.2.1), any initiative modifiers associated with that action are added to the character’s next phase *action point total*.

3.2.3 Multiple Actions

(optional)

The default assumption is that a character will perform but a single action in an action phase. However, some characters have sufficient ability that they can credibly perform several tasks concurrently.

A character declares multiple actions in the same way that they declare singular actions. As described in 3.2.2, initiative modifiers are added to the characters next *action point total*. Add only the *lowest* initiative modifier to the

character’s action point total upon declaration.

When performing multiple actions in a phase, the EF of all attempted tasks are reduced by -1 per action attempted past the first.

At the end of the action phase, apply a -1 to the character’s *action point total* for each action performed in the action phase, and add in all initiative modifiers except the lowest (which was added in the declaration step.)

3.3 Movement

3.4 Attack Resolution

In Starfarer, the combat system is based upon the same task system that is used to handle all other tasks. However, there are some additional mechanics needed for resolution of damage as well as other factors.

The success (or failure) of an attempted attack on a person or object is handled by a success based task. There are two basic types of attack in Starfarer: Ranged and Melee. Task profiles for each are outlined below:

Table 3.1 Ranged “To Hit” Task.

To hit in ranged combat:
(Dexterity, Weapon*), x EF*
EF is based on range to target: Close*: x5 Medium: x5 Point Blank: x7 Long: x4 Short: x6 Extreme: x2 *Close range if within target’s melee range Ranges are on range table
EF Modifiers: (-) Any modifiers from target’s evasion task Any modifiers from ranged modifier table LOS Modifiers: Any modifiers from ranged modifier chart
LOS: Each LOS is a x1 damage multiplier

Table 3.2 Melee “To hit” Task

To hit a target in Melee combat:
(Weapon* or Unarmed, Agility), x5
EF Modifiers: (-) Any modifiers from target’s evasion or parry task Any modifiers from melee modifier table
LOS Modifiers: Any modifiers from melee modifier chart
LOS: Each LOS is a x1 damage multiplier

Whenever a character attempts an attack during combat, the player (or GM, for NPCs) rolls an immediate success based combat task as defined above. If successful, the resultant LOS is used to determine damage inflicted by the weapon.

3.4.1 Ranges

When using range weapons in a task, the firing player (and/or GM) must determine how far away the target is, and check this against the weapons range table to determine which range bracket the target is in. These range bracket is split up into the categories of Point Blank, Short, Medium, Long, and Extreme.

Additionally, a target is considered to be at *close range* if the target is eligible to make a melee attack on the firer during the current round.

Not all weapons have the extreme range bracket. Only weapons that have munitions that remain lethal beyond the effective aiming range of the weapon have this category, any it extends out to 1.5 times the long range of the weapon.

Ranges vary from weapon to weapon, but all weapons follow a general scheme. Weapons have a range rating based on the length, aiming characteristics, and power of the weapon. The general table that defines most weapons in the game is listed below by range rating.

Table 3.3: Weapon Ranges by Range Rating

Range Bracket	Ranges by Range Ratings							
	1	2	3	4	5	6	7	8
PB	1m	2m	3m	4m	5m	6m	7m	8m
S	5m	10m	15m	20m	25m	30m	35m	40m
M	10m	20m	45m	80m	125m	180m	250m	320m
L	30m	100m	300m	1000m	3000m	10km	30km	100km
E*	45m	150m	450m	1500m	4500m	15km	45km	150km

*- not all weapons have an extreme range bracket.

3.4.1 Hit location

Before resolving damage, you must determine where the attack hits. If the target is a human or is generally human shaped (like a humanoid android), then simply look at the

“ones” dice (i.e., the low order digit) of the percentile roll. Use that number as the roll on table 3.4.

Some weapons hit multiple locations at once - like explosives and plasma weapons. See the special rules for those weapons for

details.

Table 3.4: Human Hit Location Chart

Low dice:	1	2-4	5-6	7	8	9	0
Result:	Head	Chest	Abdomen	Right Arm	Left Arm	Right Leg	Left Leg

3.5 Damage Calculation

Each weapon is listed with a penetration rating followed by a damage rating, separated by a slash. A typical rating for a light projectile weapon would be 7/5, meaning it has a *Penetration Rating* of 7 and a *Damage Rating* of 5. *Penetration Rating* describes the weapons ability to defeat armor. The *Damage Rating* describes the inherent destructiveness of the weapon.

When a target is hit by the weapon, follow these steps. The procedure is simple, but the order of each step is important.

1) Find the target's *Armor Rating*. Subtract the *Penetration Rating* of the weapon from the *Armor Rating* to find the *Modified Armor Rating* for this attack. Treat results of less than zero as zero.

2) Subtract the *Modified Armor Rating* from the *Damage Rating* to find the *Modified Damage Rating* for this attack.

3) Multiply the *Modified Damage Rating* by the *Level of Success* of the attack. If the LOS is zero, multiply the *Modified Damage Rating* by ½. This is the applied damage.

Example: Kitai Kurugumi fires his laser pistol at an opponent that is 15 meters away. He has a skill of 5 with the laser pistol, and a dexterity of 7, giving him a BCS of 12 for the task. The target is 15 meters away, which is medium range for a laser pistol. The ranged to hit task has an *Ease Factor* of 5 at medium range, thus the MCS of the task is 60. A 24 is rolled for the attack. The *Level of Success* for the attack is 3, and since the second dice of the percentile roll was a "3", the laser hits in the chest.

The laser is a 2500j model with a *penetration rating* (PR) of 10 and a *damage rating* (DR) of 9. The target has level 16 armor against lasers. The penetration is

subtracted from the armor rating for an effective armor rating of 6 (16 - 10 = 6.) This effective armor rating is subtracted from the damage rating for an effective damage rating of 3 (9 - 6 = 3). The LOS was 3, so the applied damage is 9 (3 x 3 = 9.)

3.5.1 Blow Through Rule (optional)

In the Starfarer system, a *marginal* (LOS 0) is typically considered to do minimal damage. However, some weapons have huge DRs that allow them to cause heinous wounds even though a marginal success is all that was rolled. In essence, very large weapons can never produce graze or even light damage results.

Some DMs may have a problem with this inherent level of coarseness in the damage system; accordingly, this rule puts a limit on the damage large weapons do to small target.

Under the *blow through rule*, large weapons are assumed to be wasteful when used against small targets. If the *modified damage rating* exceeds the target's mass, then reduce the *modified damage rating* to equal the target's mass rating prior to multiplying by the LOS of the attack.

There is a limit to this though. Do not reduce the modified damage rating by more than the target's mass rating. Strikes from very large weapons, such as laser artillery, tend to be deleterious of any life, regardless of the fact that the hit was somewhat "peripheral."

Accordingly, if the modified damage rating is over 2x the target's mass, reduce the modified damage by the target's mass.

Example: Kitai Kirugumi has the same 2500j weapon described in the previous example: PR 10, DR 9. He has the occasion to fire his laser at an unarmored target, a normal

sized human with a mass rating of 6.

Against this target, the modified damage rating would normally be 9. However, this exceeds the target's mass rating, so the modified damage rating is reduced to 6. If Kitai has an LOS of 3 against this target, the applied damage would be 18 points.

Later that day, Kitai finds a Phemorian Camprat (a pesky native life form that is mass rating 4) digging through his equipment. He fires his laser at the annoying beast. The Camprat has no armor to speak of. Normally, the modified damage rating would again be 9. This exceeds 2x the Camprat's mass rating of 4, so the modified damage is only reduced to 5 (instead of 4.) A LOS 3 hit against the Camprat would do 15 points.

3.6 Damage Resolution

Section 3.5 (above) discusses how to generate an abstract damage number that is used in combat to help determine the effects of a successful attack. This section discusses how the damage number is applied to most living beings.

3.6.1 Weapon Lethality

All weapons have a statistic called *Lethality*, which is the sum the weapon's *Penetration Rating* and *Damage Rating*. This is not tabulated in the weapon tables as it is easy enough to determine on the fly in most cases. This figure is important because it determines how severely a weapon affects a given target. Smiting a large, physically fit man with a nightstick might only irritate him, but the same blow might prove lethal for an elderly man in poor health. However, either man would doubtlessly be slain by a large caliber railgun slug at point-blank range.

3.6.2 Assessing Damage

The normal condition in a firefight is that all damage taken by an individual is applied 100% to both the shock total and towards the individual wound tracks. This is true whenever the lethality of the weapon inflicting the damage has a lethality at least equal to the

targets *resilience* rating.

However, if a weapon's lethality is less than the target's resilience, *wound* damage is lessened. If the lethality of the weapon is less than the target's resilience, record the full amount of damage to the target's shock total, but only count half of the damage (round up) when allocating wounds (see section 3.6.3)

In addition to this, if the area hit was the target's head, double the damage for purposes of shock value and wound effects.

3.6.3 Allocating Wounds

The final step of damage allocation is assigning damage to wound and shock totals. Each character sheet has places to record wound damage and shock damage.

Wound damage is recorded separately to each body part. When a character takes damage to a body part, enter the amount of damage in the box for that body part. If that area has already been damaged, add the new wound amount to the old wound amount for that area. Remember that if the lethality rule is being used, the amount of damage applied to specific body areas is halved if the lethality is less than the target character's resilience.

Next to the box in which wounds are recorded is a track with the letters corresponding to the various injury levels: G, L, M, H, S, D, D+. During character generation, amounts corresponding to each of these numbers were obtained for the character. Check the total wound damage of the area against this scale. Circle the rightmost letter for which the wound damage equals or exceeds the corresponding number on the scale.

Example: Drexler is an average sized character with a mass of 6. Drexler would have 4 listed for a "L" (light) wound and a 6 listed for an "M" (medium) wound (see section 1.8.) If Drexler takes 5 points of damage to his chest, then the L is circled in the "chest" column. Should Drexler take one more point of damage to the chest (for a total of 6), the wound level would become medium; Drexler's player would circle the "M" in the "chest" column to indicate this.

3.6.4 Allocating Shock Damage

In addition to the effects of specific wounds on the body, the player must keep track of shock damage for the character. This describes the effects of pain, shock, and bleeding on the body as a whole

Whenever a character takes damage, in addition to applying those points as wound damage, the character enters any such damage as shock damage. Note that if the lethality rule is being used, you DO NOT half the damage applied to shock as you do to damage applied to the wound total.

Similar to the way that the injury level is determined for a wound in an area, the shock total is checked against the shock scale. The abbreviations are identical, but a different scale is used. Compare the shock total to the shock scale, and circle the appropriate letter.

While most of the time, damage will be applied to shock and wound concurrently, there are some effects that will impact the body as a whole that do not affect a given area specifically. Such effects include, but are not limited to, bleeding, poison, and disease. The effects of these types of damage are usually applied directly to the shock damage total without being applied to any wound areas. The specifics of these types of damage are discussed elsewhere in this chapter or in the GMs guide.

3.6.5 Effects of wounds: Trait Penalties

In Starfarer, damage to the body can have immediate debilitating effects. How severe the effects depends partially on how severe the wound is.

The first effect of any wound is that the character suffers a trait penalty to any task they attempt using that body part. For example, injuries to one's arm affects any to-hit tasks involving that arm; wounds to legs impair movement, etc. Wounds to the chest and abdomen affect *all* tasks at ½ level (round up) due to the shock and pain involved. Wounds to the head affect all tasks at full level.

The trait penalty is listed at the bottom of the wound chart in the row labeled "modifier." Any task attempted using the affected limb,

subtract the shown number from EACH trait the character has relevant to the task.

Similarly, if a character has enough accumulated points of shock damage, there may be an adverse effect. If the character takes at least 2 times their basic shock potential, they suffer the same modifier as listed under the appropriate column on the character sheet. For example, if your character has suffered 3x the basic shock, the character suffers a -2 penalty. This applies to traits for all actions.

3.6.6 Effects of Wounds and Shock

If a character takes a wound of medium level or higher, the player must make a disability check every round in order to use the affected body part that round.

If a character takes a wound of heavy (in a vital area) or severe (in a non-vital area), the character must succeed in a shock check or lapse into unconsciousness.

If a character takes mortal level wound (NOT maimed), the character must make a survival check every round or die.

In addition to the effects of wounds, a character must make a shock check whenever:

- The character takes an amount of shock damage in a single attack equal to or exceeding the character's STUN characteristic, or:
- The character's shock total passes one of the multiples of the basic shock characteristic.

The task profiles required for these checks are as follows:

Disability check:

To use an injured extremity
(Endurance, Willpower) x 5

Modifiers:

Subtract the wound level modifier from the EF (not from the traits.)

Success allows the character to use the extremity for tasks using the affected body part, subtracting the modifier from the character's traits.

GM: Only required if the character has a level 3+ (medium or worse) wound.

Shock Check:

To remain conscious:

(Endurance, Willpower) x 8

Modifiers:

Modify EF by the wound level penalty or shock level penalty.

If the character fails, LOF is the number of rounds for which the character loses consciousness. After this time, the character may make another check to regain consciousness. If this second check fails, roll LOF in d10 to determine the amount of rounds until any further checks are made.

Any LOF over 3 results in an additional wound in the same body area at the next higher level.

This wound is marked as a slash (/).

GM: This check is required if:

- passing a shock threshold
- taking an amount of shock in excess of the character's *stun* characteristic.
- taking a *heavy* or worse wound in a vital area.
- taking a *severe* or worse wound in a non-vital area

Survival Check:

To avoid death when mortally injured or when in the "x6" bracket for accumulated shock damage.

(Endurance, Essence) x 8

Modifiers:

-1 to trait levels for each round past the first with the wound untreated.

GM: This check automatically fails if the character has taken over 2 times the basic "mortal" level of damage.

3.6.7 Bleeding

If a character takes a wound that has a negative modifier associated with it, they are considered to be *bleeding*. The amount of the negative modifier is how many additional shock the character takes every round.

A character can attempt to slow or stop the bleeding; see the section on treating wounds. There is also a small chance that bleeding will stop of its own accord:

To stop bleeding without treatment:

(Endurance) x5

Modifiers: -1 EF per point of bleeding in area.

Success automatically stops one point of bleeding.

LOS: Each LOS stops an additional point of bleeding.

DM: Only check once every number of rounds equal to the rate of bleeding. Check individually for each area wounded.

As an optional rule, blunt instruments are less likely to cause severe bleeding. Divide bleeding rate from blunt instruments by 2 (round up).

3.6.8 Specific Injuries

The above rules are a general system to handle injuries during a heated combat. After the combat is resolved, surviving characters may make use of the specific injury charts in the appendix to determine the exact nature of the involved injuries.

3.7 Using karma

Karma is provided in the game to provide some continuity to player characters as well as important NPCs.

In combat, Karma may be used to:

- Boost the LOS of any task that the character is called on to make, as in non-combat situations. The character can use this on task checks including to-hit tasks, parry or evasion tasks, aiming tasks, shock checks, or survival checks. As with regular task check, each Karma spent increases the LOS by 1.
- Mitigate damage: any time damage is allocated to the character, the character may choose to spend karma point to reduce the damage. Each point spent reduces the category of damage by one level. For example, a mortal wound could be reduced to a severe wound by spending one karma point. Reducing a mortal wound to a graze would take 5 points. All points spent by the character in this way must be spent immediately, otherwise see the heal damage entry.

When the wound level is decreased in this way, the shock damage is also reduced. The shock damage is reduced to the highest amount of damage appropriate to

the modified wound level. For example, if a 20 point hit to a normal size human would normally be a maim/mortal result. Spending one point to reduce the wound to severe also reduces the damage from this hit to 15 points, the highest in the severe category.

- Stop bleeding: Each point of karma spent will stop one point of bleeding.
- Heal damage: Each 2 points of Karma left will reduce a wound level by one. Each point of karma will heal 2 points of shock damage.

STARFARER

Chapter 4: Character Creation Lists

Appendix A1: Skill Descriptions & Specializations

Table A1.1: Master Skills List

Acrobatics	Forgery	Persuasion
Acting	Gaming	Profession
Administration	Gunnery	Quick Draw
Animal Handling	History	Riding
Artist	Hostile Environs	Science
Astrogation	Interrogation	Stealth
Athletics	Intimidation	Streetwise
Bribery	Intrusion	Survival
Charm	Investigation	Tactics
Computer	Knowledge	Tracking
Con	Language	Trading
Culture	Law	Unarmed Combat
Demolition	Leadership	Vehicle
Disguise	Mechanic	Weapon: Heavy
Dodge	Medicine	Weapon: Melee
Electronics	Movement	Weapon: Ranged
Engineering	Navigation	Weapon: Thrown
Equipment Operation	Observation	

4.1 Skill Descriptions:

Acrobatics

Description: Acrobatics is the ability to perform difficult maneuvers in the air - by creatures that normally don't fly on their own power. Such abilities may be useful when precise maneuvering is required or to gain an advantage in combat.

Limiting Trait: Jumping

Specializations: Combat acrobatics, catwalk, break fall.

Acting

Description: This skill normally used to portray an alternate personality and emotions self as another person. Normally, this is used to entertain an audience, but occasionally can be used to misdirect an enemy.

Limiting Trait: Charisma

Specializations: Dramatic, Sensenet, Infiltration

Administration

Description: This is the ability to operate efficiently when dealing with or in a position of authority within a hierarchical organization. This skill would be useful in processing requests through paperwork or a chain of command.

Limiting Trait: Willpower

Specializations: Military, Corporate, Bureaucracy

Animal Handling (Categorical)

Description: This categorical skill entails the ability to deal with a certain class of wild animals, train or domesticate them, and utilize domesticated ones to perform certain tasks. Ease factors of related tasks would vary widely depending on the trainability of the animals, and not all specializations would be available to all categories (e.g., most mammalian

herbivores cannot be trained to hunt, falconry is generally not applicable to non-flying creatures, etc.)

Categories: General class of animals (e.g., mammalian herbivores, mammalian carnivores, reptilian carnivores, etc.)

Limiting Trait: None

Specializations: Specific tasks or purposes (e.g., falconry, hunting, herding, guard animals, attack animals, household pets.)

Artist (Categorical)

Description: Artist encompasses a number of skills that allow an individual to make artistic objects and creations.

Categories: Drawing/Painting, Computer Graphics, Sculpting, Dance, Sensenet, Photography, Cinematography

Limiting Trait: Varies. Drawing/Painting, Sculpting: Dexterity. Graphics: Reason. Dance: Agility. Cinematography, Photography, Sensenet: Perception.

Specializations: Specific media or forms (e.g., cultural dance, slasher movies, watercolor painting.)

Astrogration

Description: This is the ability to plot the course of a spacecraft through normal and Q-space.

Limiting Trait: Physics.

Specializations: N-space, Q-space, Orbital, Atmospheric.

Athletics

Description: This is familiarity with and conditioning needed to participate in a variety of athletic activities. Some athletic activities are handled under the movement skill (running, sprinting, jumping.) Some specific sports activities may incur significant penalties to those unfamiliar with the sport.

Limiting Trait: Endurance. Some specializations may be limited by other attributes, such as agility, dexterity, or strength.

Specializations: Throwing, Weightlifting, specific sports.

Bribery

Description: This is the skill in offering graft for favors in an appropriate (usually

unobtrusive) manner. This is normally thought of as an illicit activity, but in some societies and situations, graft and kickbacks are a perfectly normal and acceptable way of doing business.

Limiting Trait: Charisma

Specializations: Kickbacks, Political Graft, Specific societies or organizations.

Charm

Description: Charm is the ability to interact socially, forming and improving relations with other individuals. This is usually applied on a small scale, only a handful of people at a time at most. EF penalties may apply if the character lacks specializations pertinent to the characters' current situation, or trying to interact with members of an unusual or alien society.

Limiting Trait: Charisma

Specializations: Carousing (interacting in casual social setting), business, flirting (interacting with potential sexual partners), specific societies.

Computer

Description: This skill involves the general use of computer systems and software to achieve desired results and retrieve information. It does not directly involve repair of computer systems, writing or debugging software, or hardware; these are the province of electronics and engineering (computer) and engineering (electronic) skills.

Limiting Trait: Reason

Specializations: VRnet, specific applications or operating systems.

Culture (Categorical)

Description: This is familiarity with the customs, laws, and mores specific to a culture. Having this skill may prevent penalties when utilizing other interaction skills in the culture, or may allow the player to make judgments about expectations or appropriate behavior for the culture.

Categories: Specific culture.

Limiting Trait: Perception.

Specializations: Specific subcultures or social settings within the culture.

Demolition

Description: This is the skill required to safely handle and safely and effectively use explosives for a variety of reasons. Most often this is to destroy structures or alter landscape. Other common uses are to perform infrasonic testing, pyrotechnic displays, and thermal boring charges to create shafts for mining.

Limiting Trait: Reason

Specializations: Civil, Landscape, Combat, Pyrotechnics, Infrasonic, Thermal Mining

Disguise

Description: Disguise is the ability to alter one's appearance and behaviorism so as to appear as someone else. In the simplest form, this could be altering one's garb and mannerisms to appear as a technician. In more complex forms, this is using props and pigments to appear as a completely different person. Acting skill is also useful in pulling off such ruses.

Limiting Trait: Charisma

Specializations: Imitation of a specific person or type of person, make-up artistry, unobtrusiveness.

Dodge

Description: This is the useful ability to avoid being hit in combat. Its use is covered extensively in the chapter on combat.

Limiting Trait: Agility.

Specializations: Ranged Weapons, Melee Weapons, Traps, Explosions.

Electronics

Description: This is the skill required to maintain and repair a large variety of electronic equipment, from computers to beam weapons. Having this skill is also a good sign of intelligence.

Limiting Trait: Reason

Specializations: Computers, Beam Weapons, Communications, Sensors, other applications

Engineering (Categorical)

Description: Engineering skills are used to design and produce technological tools and other products. The specifics vary widely by category.

Categories:

Computer Engineering: This is the use of

programming languages or other tools to provide software and ROM programming (this does not extend to actual system design, which is the province of electrical engineering.)

Electrical Engineering: This is the design of systems that utilize electricity a majority of their design, including computer hardware and electronic control systems.

Mechanical Engineering: This is the skill used in the design of devices that have structural members, moving parts, move fluids, and transfer heat. Examples might be starcraft hulls, cooling systems, or chemical engines.

Power Systems Engineering: This is the ultra-modern equivalent of nuclear engineering. It involves the design of systems that create and utilize high energy fields, such as fusion plants, plasma engines, and Q-drives.

Limiting Trait: Varies. All have mathematics. Computer engineering has computer skill. All others have physics.

Specializations: Specific disciplines with in fields, such as: Civil, Structural, Astronautics, Cooling systems (mechanical), Computers, Nanotechnology, Lasers (electronic), Evolutionary programming, specific programming languages (computer), Q-drives, Fusion plants (power systems).

Equipment Operation (Categorical)

Description: These skills represent the training in use of special equipment that requires certain expertise and/or knowledge of procedures to safely or effectively use.

Categories: Sensor Operation, Surveillance Equipment, Starship Engineering, 20th century VCR-based chronographs, other special equipment.

Limiting Trait: Reason.

Specializations: Specific types of equipment in each category, e.g., *Starship* sensors, *Laser-sonic* surveillance devices.

Forgery

Description: This is the skill needed to manufacture convincing falsified documents that may be required for various purposes, including identification papers, receipts, security badges, and authorizations of various types.

Limiting Trait: Dexterity

Specializations: Signatures, Computer, ID

documents, Receipts, Licences.

Gaming (Categorical)

Description: These skills represent a knowledge of the rules and strategies of certain games. Some games may have their own specific skills; others may include a variety of related games and have specializations to represent specific games.

Categories: Card-games (Poker variants), Card-games (Blackjack variants), Role-Playing Games, Dice Games, Wargames

Limiting Trait: Reason

Specializations: Specific games or tight categories of games, e.g., Guild&Empire, Stud Poker, Trichip

Gunnery

Description: This is skill with crew-served or vehicle mounted weapons, typically ones having a range of 5 or more.

Categories: Missiles, Projectile, Beam Weapons

Limiting Trait: Perception

Specializations: Specific subtypes or mountings: crew-served, starship mounted, particle cannon, railgun.

History (Categorical)

Description: This skill includes familiarity with topics concerning the annals of a certain race, region, or organization.

Categories: A given race or interstellar government (e.g., The Guild Protectorate), Megacorp, or major world.

Limiting Trait: Reason

Specializations: A specific topic (Literature, Spaceflight), time period (2300-2400), or region (a small group of related minor worlds or region on a major world.)

Hostile Environs

Description: This skill is experience in the use of techniques and equipment used in hostile environments. This is a singular skill, as use of measures to protect one's life in one environment is generally similar to another – using a vacc suit on an airless moon isn't that much different than using vacc suits in deep space. However, while the basic means of protection in different environments is superficially similar, the specific hazards and techniques can be quite different. If a character

does not have the appropriate specializations, the GM should assess modest to severe penalties – maneuvering in zero-g is very different from maneuvering in jovian atmospheres.

Limiting Trait: Agility

Specializations: Zero-g, Vacuum, Low-G, High-G, Jovian, Underwater, Iceworld, Hotworld.

Interrogation

Description: This skill represents the use of inspiring of anxiety in a victim, other psychological methods, or outright torture to obtain and interpret information from an unwilling or unwitting individual, as well as effectively debriefing willing targets.

Limiting Trait: Willpower

Specializations: Torture, Psychological, Debriefing, or against specific target type or race.

Intimidation

Description: This is the use of such methods as daunting appearance, actual or implied violence, and thinly veiled--or vividly described--threats to cause anxiety in an individual or to manipulate their behavior.

Limiting Trait: Charisma or Strength

Specializations: By method (daunting appearance, violent behavior, threats) or target type.

Intrusion

Description: This skill allows the individual to defeat devices and security measures used to restrict their movement or access to certain areas. This includes a wide variety of activities, from safecracking to escape from bindings. Some activities are exceptionally difficult and would require a specialization to perform without penalty.

Limiting Trait: Dexterity

Specializations: Escape Artist, Safecracking, Picking Locks, Disarm Traps, Evade Surveillance, other specific activities.

Investigation

Description: This is skill in a variety of methods that one uses to obtain otherwise unobvious bits of information about a given subject. It does not include forensic investigation.

Limiting Trait: Perception

Specializations: Canvassing, Interviewing, Research.

Knowledge (Categorical)

Description: This is a broad group of skills that describes familiarity the character has with one of a variety of subjects. This may be a scholarly area of study or a simple familiarity such as the familiarity one has with their hometown. More specific categories or might allow the character to make rolls concerning the topic in question with no penalty where a specific question might require penalties for a person with a broader skill.

Categories: Specific skills fall into more general headings of techniques, people, organizations, places, or things. Example of each category are: feng shuei, acupuncture, horse breeding (techniques), Triumvirate figures, MegaCorp execs, important scientists (people), The Patrol, The Jacobsen corporation, The Interstellar Resources Defense Council (organizations), Terra, Guild Space, The Shattered Frontier (Places), AI technology, Triumvirate Politics, and Godosian Archeology (Things).

Limiting Trait: Reason.

Specializations: Specific areas withing a general area of knowledge, e.g., current Triumvirate figures, the Special Services division of the Patrol, the North American region of Terra.

Language (Categorical)

Description: This is the ability to understand and communicate using a given language. Although one does not need any sort of specialization to speak another language, it is very difficult to learn all of the idioms and inflections that a native speaker of a language uses, and this foreign speakers of a language must make rolls to effectively pass as a native speaker.

Categories: The specific language to be learned.

Limiting Trait: Reason.

Specializations: Specific dialects, idiomatic usage.

Law (Categorical)

Description: These are skills understanding and applying the laws of complex societies. It might be needed to ensure that individuals or

organizations are complying with regulations, as well as acting as a barrister in a court setting.

Categories: Specific law-utilizing entities.

Where similar laws are applied to a large area but specific variations exist, a broad skill with specializations is warranted. Examples: Triumvirate Interstellar Law, Protectorate Interstellar Law, Corporate Laws (specify), World Law (specify).

Limiting Trait: Reason.

Specializations: Specific areas or subjects.

Examples: Protectorate Trade Law, Triumvirate Military Justice.

Leadership

Description: This is the skill required to effectively motivate and inspire subordinates as well as effectively managing their efforts.

Limiting Trait: Charisma

Specializations: Specific settings or applications; Business Management, Military, Network

Mechanic

Description: This is the skill needed to repair and maintain mechanical devices and structures.

Limiting Trait: Reason

Specializations: Specific types of devices: Pumps, Starship Hulls, Plasma Conduits

Medicine

Description: This is the skill needed to maintain the health of living beings, either against mundane adversities and illnesses, or to repair damage caused by trauma to the body. This skill has a wide variety of specializations. A practicing physician would probably have many such specializations as well as a high level in the basic skill.

Limiting Trait: Biology, Physiology

Specializations: Pharmacology, Internal medicine, Physician, Surgery, Physical therapy, Cybernetic Medicine, Health Care / Nursing, Oncology, Paramedic, Neurology, Nanotherapy.

Movement (Categorical)

Description: These skill represents training the character has with their normal racial modes of movement beyond that represented by agility and endurance. Any character can attempt

most of these tasks without training, but some may suffer penalties if it is not inherent to their race (such as humans swimming) or be wholly inappropriate for their race (such as flying for humans).

Categories: Jumping, Running, Climbing, Swimming, Flying, Brachiation

Limiting Trait: Agility, Endurance

Specializations: Specific environments and means of movement: Broad jumping, high jumping, SCUBA diving, Climbing Trees

Navigation

Description: Where Astrogration refers to plotting movement in 3 (or n-) dimensional environments, Navigation refers to finding one's way on or near a world's surface utilizing charts or landmarks.

Limiting Trait: Mathematics

Specializations: Specific environments or techniques: Aerial, Instrument, Sea, Forest.

Observation

Description: This is a "trained eye", useful in a variety of circumstances where small details may be important. The basic skill should be usable with the character's perception attribute with no penalties, but having specializations may be important in specific circumstances.

Limiting Trait: Perception

Specializations: Military Scouting, Surveillance, Intelligence, Notice

Abnormalities, other specializations by purpose or setting.

Persuasion

Description: While the charm skill allows a character to change the reaction of NPCs towards the character, this skill allows the character to influence one or more NPCs' views of an idea, concept, or course of action. With this skill, the character change the opinion of an individual or a group concerning the validity and pertinence of a statement or idea.

Limiting Trait: Charisma

Specializations: Fast Talk, Oratory, Essays, Bargaining, Diplomacy, specific settings or targets.

Profession (Categorical)

Description: These are skills or training that one needs to practice certain professions that

are not explicitly covered by other skills.

Categories: Specific professions: Accounting, Cook, Secretary, Waiter, Radiologist, Waste Management, Hazard Control, Cashier, Zookeeper.

Limiting Trait: Varies.

Specializations: Specific activities within discipline.

Quick Draw

Description: This is the ability to rapidly bring a weapon to bear in combat. In surprise situations, it may be used to offset penalties to the character's reaction score. While this usually implies the character using a weapon, a specially unarmed allows an unarmed character to execute an attack on an enemy before they can bring their weapon to bear.

Limiting Trait: Dexterity

Specializations: Melee weapons ("iajitsu"), Pistols, Longarms, Unarmed

Riding

Description: This skill is usually utilized in riding various beasts of burden, but can also apply to trick riding or riding of vehicles where the character rides externally (e.g., gravbikes) in addition to the vehicle skill.

Limiting Trait: Agility

Specializations: Specific class of riding beast or vehicle, Trick riding, Gravbike, Rodeo-riding

Science (Categorical)

Description: This skill includes the gamut of scientific endeavors. Many of these fields overlap extensively, but consideration should be given by the GM as to when certain science skills can be used in the place of others, and what penalties apply when doing so.

Categories: Mathematics, Physics, Biology, Physiology, Astronomy, Archeology, Genetics, Geology, Planetology, Paleontology, Zoology, Psychology, Sociology.

Limiting Trait: Varies. Most hard sciences require mathematics and/or physics; most life sciences require biology.

Specializations: Specific fields within the broader categories: Astrophysics, Microbiology, Archeology of specific race.

Stealth

Description: This is the skill required to hide,

move unobtrusively, or otherwise avoid detection by other people or security and surveillance devices.

Limiting Trait: Agility.

Specializations: Hiding, Shadowing, Camouflage, Penetrate Security, Evade Surveillance.

Streetwise

Description: This is the skill used to interact safely and effectively with the shadier elements of society. Using this skill, the character can make contacts get information or goods, as well avoid conflicts.

Limiting Trait: Charisma

Specializations: Black Market, Inside information, specific regions or criminal organizations.

Survival

Description: Survival is the skill required to find basic necessities of life in uncivilized or otherwise hostile surroundings.

Limiting Trait: Perception

Specializations: Specific terrain types or activities (foraging, water acquisition), Urban

Tactics

Description: This is proficiency is effectively utilizing resources and predicting enemy actions in real or simulated combat situations.

Limiting Trait: Reason.

Specializations: Small unit tactics, strategic deployment, single ship, fleet, covert action, other specializations appropriate to application or setting.

Tracking

Description: This skill is used to find living beings or other unobvious objects, usually in a wilderness setting, by observing signs of its passage. Note that this does not cover finding a person through research and canvassing; that is the purview of the Investigation skill.

Limiting Trait: Perception

Specializations: Specific setting or applications: urban, hunting.

Trading

Description: This skill is familiarity with the world of free commerce. Includes the ability to assess value of items, find buyers or sellers,

and make profitable transactions.

Limiting Trait: Willpower

Specializations: Appraisal, Bargaining, Speculation, Stock Trading, specializations specific to certain races, regions, or types of items.

Unarmed Combat

Description: This is the ability to hurt someone with your bare hands--or feet, or tentacles, or whatever.

Limiting Trait: Agility

Specializations: Specific Maneuvers or Martial Art styles.

Vehicle (Categorical)

Description: This is the general ability to operate one of a number of vehicles. While some vehicles actually take several people to operate, this skill is the one that applies to primary pilots of the vehicle.

This skill does not include skills in operating supporting or engineering systems associated with the vehicle, or navigation (or astrogation of the vehicle.)

Categories: By vehicle type: aircraft, spacecraft, wheeled vehicle, motorcycle, tracked vehicle, helicopter, ground effect.

Limiting Trait: Dexterity

Specializations: Specific subtype of vehicles or modes of operation: Jet Fighter Aircraft, Spacecraft (Battlecruiser), VTOL operation, Racing Motorcycle, Tank.

Weapons, Heavy (Categorical)

Description: This is the use of weapons that are man portable, but must be fired stationary from a pintle or tripod, or are mounted on Personal Mechanized Unit armor. In most cases, these weapon are RC 5 or 6, but this applies to some railguns and particle cannons of RC 4.

Categories: By weapon type: Missiles, Mortars, Projectile, Beam.

Limiting Trait: Dexterity or Perception.

Specializations: Specific weapon within categories (Railguns) or special modes of use (indirect fire).

Weapon: Melee (Categorical)

Description: This is the skill of using implements in melee combat.

Categories: Cudgels, Swords, Knives, Axes,

Staves.

Limiting Trait: Agility

Specializations: Specific weapon types: Tanto (knife), Gladius (sword), Chair (Cudgel)

Weapon: Ranged (Categorical)

Description: This is the skill of using man portable ranged weapons, RC 4 or less.

Categories: Energy Pistol, Energy Longarm, Projectile Pistol, Projectile Longarm, Bows, Crossbows.

Limiting Trait: Dexterity.

Specializations: Specific weapon subtypes: MLA (Railgun) pistols, Laser Rifles, Muzzle-

loading rifles, etc.

Weapon: Thrown

Description: This is the ability to use weapons that are hurled by the character without the aid of other devices. This skill is not considered categorical, but some weapon types are bizarre enough that significant penalties should be assessed if the character lacks specialization.

Limiting Trait: Dexterity.

Specializations: Specific weapons: Daggers, Darts, Shuriken, Bolos.

Appendix A2: Advantage Descriptions

Table A2.1: Master Abilities List

Acute Senses	Fast Healing	Prodigy
Alien Empathy	Fearlessness	Psionic Aptitude
Alertness	Intuition	Reputation
Ambidexterity	Life Support	Resist Disease
Aptitude	Light Sleeper	Resist Toxins
Attractive	Longevity	Resist Pain
Combat Reflexes	Mental Calculator	Size Advantage
Cyber Receptive	Movement	Speed Reading
Direction Sense	Photographic Memory	Toughness

4.2 Ability Descriptions

Abilities are given the designations in square brackets of X,G,A, or O. “X” means that the ability may be part of a xeno-template. “G” means that the ability may be part of a geno-template. “A” means that the ability may be part of an archetype template. “O” (short for “open”) means that the ability does not have to be purchased part of a template.

Acute Senses (Categorical)[X,G,O]

Description: Acute senses reflect an above average ability in one or more senses that a character uses to perceive the world. It may be purchased for any sense the character has, but each sense must be purchased separately.

Acute senses are purchased in levels like traits. Levels add to a character's perception score when the acute sense is being used, and at the GM's discretion, may offset penalties to a

task level. Levels up to 5 may be purchased openly. Above level 5 may only be purchased as part of a xeno or geno template.

Categories: Vision (normal), Vision (night), Hearing, Smell, Sight, Touch.

Cost: As skill. Only 15 CPs (5 levels) may be purchased outside of a template.

Alien Empathy [X, G, A, O]

Description: This is an unusual adaptation that allows a character to offset penalties when performing interpersonal tasks with alien species. Each level will cancel a -1 penalty per level of the Alien Empathy ability. The DM may have to determine if the character can buy this skill for extremely hostile alien species.

Categories: May be purchased for a single alien species, a set of similar alien species (any appearance category save “totally alien.”), or for all alien species.

Cost: Cost is as a skill x5 for a single alien

species. Add 1 to the effective skill level for cost purposes for similar alien species (thus level 1 in alien empathy in “amoebic alien life” would cost 15 points). Add 2 for all alien life forms; the GM may limit the use of this ability. The GM may also impose a cost penalty for taking a skill with truly alien species, and the ability may not counter specific cultural penalties.

Alertness [X, G, A, O]

Description: Similar to Acute senses, alertness is indicative of a character’s ability to perceive and react to situations more rapidly than an average human. The level of ability in alertness is added to the characters reaction score the first round of a combat, and may be used as a bonus to a characters perception in situations in which the character must perceive and react to a threat. Add 1 to the EF of any checks to determine surprise for each two levels (or fraction) of alertness ability.

Cost: As skill x3.

Ambidexterity [X, O]

Description: Normally, most species only have one primary manipulatory appendage (hand). Tasks with the off hand may suffer up to a ½ penalty on agility and dexterity, or up to a -2 penalty on ease factors using an off hand. Having this advantage offsets all such penalties, but not penalties for multiple actions in a round.

Cost: 5 points.

Aptitude [X, G, O]

Description: An aptitude is a special knack with a skill or set of skills. A character may only buy this ability once, but it may encompass several skills.

A character receives a +1 skill bonus or offsets a -1 EF penalty with any skill that the aptitude applies to. The DM decides which is more appropriate.

Cost: Treat the number of skills the aptitude applies to as a trait level and consult the trait cost chart as a skill x5.

Attractive [G, A, O]

Description: Normally, a character’s appearance is defined by their charisma and endurance. A character with the attractive

advantage is considered a desirable specimen among their race and gender where appearance is concerned.

A character is considered to start out with an appearance “attribute” of 4. For each level of appearance purchased beyond this, the character receives a + 1 bonus on reaction checks for the opposite gender of their own species and half of this towards the same gender, or on other interpersonal tasks of the same gender.

Cost: As attribute. If the character chooses to have appeal that only applies against a certain subculture, then they may take the ability at ½ cost.

Combat Reflexes [X, G, A, O]

Description: A character with combat reflexes is quick in combat and difficult to get the jump on. A character with combat reflexes adds their combat reflexes ability level to their reaction score and to any dodge checks.

Cost: As skill x3 A character with combat reflexes may only take up to 3 levels of the ability without a templates part of an archetype template.

Cyber Receptive [X, G, O]

Description: The intrusive act of installing hardware in the body of a living being can cause lasting shock and damage to their essence. A character with this ability reduces the essence cost of cyberware by ½ and reduces the adverse effect of failed cyber-surgery installation rolls by 1 level.

Cost: 20 points.

Direction Sense [X, G, O]

Description: A character with this ability has a sort of “internal compass.” The instinctively know what direction they are going and can navigate without complex equipment. This ability can normally be bought in 3 levels. The character may reduce penalties to perception and navigation rolls for not having equipment by ½ of their ability level (round up.)

Characters with direction sense-1 can determine direction of travel on foot traffic or in slow (less than 100 kph) surface vehicles. Level 2 allows the character to use this ability in fast or flying vehicles. Level 3 or higher skill

will allow the character to use the ability in interplanetary vehicles. The GM may wish to allow levels higher than this; applications might include overcoming gravitic fields and determining directions traveled in Q-space.
Cost: As skill x3. Levels above 2 may only be purchased as part of a xeno- or geno-template.

Fast Healing [X, G, O]

Description: Characters with this ability have the ability to rapidly recover from wounds and more easily survive severe wounds. For each level of ability, double the healing rate of the character. For each two levels of ability, reduce the severity of wound resolution rolls by 1.
Cost: As skill x5. Above level 2 may only be purchased as part of a geno- or xeno-template.

Fearlessness [X, G, O]

Description: Characters with fearlessness have unbreakable morale and are very difficult to intimidate. The character reduces the effects of any intimidation rolls by 4 levels, and is never required to make a willpower check when performing nerve-wracking tasks. This does not mean that the character is suicidal or overconfident, just very calm in the face of danger.
Cost: 10 points.

Intuition [X, G, O]

Description: A character with this ability has an uncanny ability to sense the outcome of a situation that they do not have all the facts about with uncanny accuracy. This ability is almost a form of psionics.

If, during the game, the player suspects something is amiss, they may request an intuition check. An intuition check is usually a check vs. perception and essence, at a level determined by the DM. The DM deducts one karma point from the character and makes the check secretly. If the check succeeds, the character receives an impression of what is wrong. If the check fails or nothing was wrong, the GM returns the karma point to the character at the end of the session

Cost: 15 points.

Life Support (Categorical) [X, G]

Description: With this ability, the character has the ability to survive environments deleterious

to human life. The nature of this ability varies wildly, but is usually the result of evolution or genetic engineering to adapt to specific environment. Heat, cold, and radiation resistance are treated as armor of the appropriate type at the level of the ability. Pressure resistance allows the character to operate in an environment with a pressure of up to $2^{\text{level}+1}$ atmospheres (for high pressure) or $\frac{1}{2}^{\text{level}+1}$ in atmospheres (for low pressure).

Categories: Heat resistance, cold resistance, radiation resistance, low pressure, high pressure, different media (water, etc.), filter toxins.

Cost: As skill. Levels above 5 are not allowed to geno-templates. Half the cost if the creature has a corresponding vulnerability to an opposite environment. Treat breathing different media as a 10 point ability and filtering toxins as a 5 point ability.

Light Sleeper [X, G, O]

Description: A character with this ability is very sensitive and even alert while sleeping. A character with this ability may make perception checks to notice intruders or other unusual occurrences while sleeping. Further, normal characters half their reaction scores the round that they wake up; characters with lightsleep forego this penalty.

Also available to xeno and geno packages are reduced sleep. This is bought in levels. Normal sleep periods are assumed to be $\frac{1}{3}$ of a standard day. A character with reduced sleep halves this ratio for each level of reduced sleep.
Cost: 10 points for light sleep. Xeno- and geno-templates may also buy reduced sleep at the cost of a skill x5.

Longevity [X, G]

Description: This ability slows the aging process in a character. A normal character starts accumulating aging points at an age of 30. A character with longevity does not start accumulating aging points until $30 + 5x$ (level in longevity) and adds their longevity to their endurance score when making aging checks.
Cost: As skill x3.

Mental Calculator [X, G, A, O]

Description: Characters with this ability may

make rapid, accurate mathematical calculations without the assistance of a calculator or computer. The character can offset time penalties for doing such calculations and may even receive a +1 EF modifier to certain tasks that require calculations (GM option.) The GM may allow the player to keep a calculator at the table and use it as a resource if needed, even if the character has no such access to such resources. The GM may, alternatively, simply tell the player the answer to any questions that would normally depend upon such calculations.

Cost: 10 points.

Movement (Categorical) [X, G]

Description: A character with this ability can move at high speed or in different mediums. This is not merely the ability to run quickly (which is covered by the movement skill) but the ability to run, fly, or swim differently than a human can.

Levels in the movement ability represent increased speed in one movement mode, usually ground (running). For each TWO levels of movement ability, double the calculated speed. For 1 level, multiply by 1.5. Swimming and jumping movement are also handled similarly.

Flying costs a base of 10 points to give the creature speed equal to its ground movement, but each level doubles the calculated speed. If the creature is considered to glide, not fly, half the cost and only double the speed for every two levels.

Cost: As skill x3. For flying, add 10 points. For gliding, ½ cost of flying.

Photographic Memory [X, G, O]

Description: This skill is very useful to a wide variety of characters, especially those in investigative pursuits. It allows the character to remember precisely events and images that the character has viewed. Nominally, there is no time limit to this memory, but over a year or so, the GM may be well within his rights to require a reason check before allowing the character access to a specific memory.

This ability has several advantages. First, it may allow the character several attempts to notice an unusual event, or specific details of a setting. The DM may allow a character with

photographic memory multiple attempts to perform reason, perception, and observation based tasks that have to do with recalling specific pertinent items.

Second, the character can remember long winded texts exactly, even if the character does not understand the subject matter. This allows the character to smuggle information in his head, or to recite important instructions exactly. The GM may allow this skill to offset penalties to a task for lacking a specific skill or specialization if the have read text pertinent to the task at hand.

This ability can easily be abused as a “universal skill.” If the character tries to read a little of everything in order to act as a jack-of-all trades, the GM should impose reason or willpower checks to keep the power of this ability reasonable.

Cost: 20 points.

Prodigy [G, O]

Description: The character is exceptionally young for a character of his or her abilities. Accordingly, when rolling the character’s age, half any positive modifiers to the character’s age (not the base 12) for each level of this ability.

If the character ends up being less than 18 years old, roll a d10 and add 8. If the total is more than the character’s age, the character is small, and is treated as having one level of size disadvantage until they reach an age equal to the number rolled on the dice. Since this is temporary, the character only gets one fifth of the points normally granted for the size disadvantage for each year they are less than the age rolled on the dice.

Cost: As skill x5.

Psionic Aptitude [X, G]

Description: Psionic ability is normally strictly a product of what race the character belongs to. Genetically engineering or eugenically breeding psionic aptitude is possible but difficult. This ability determines what range of psionic abilities are available to the character.

The default level of psionic aptitude for humans is 4. Levels above this are purchased through this ability; levels below this are considered under the disadvantage *psionic ineptitude*. The general effects of psionic ability

are as follows.

- Psionic characters are allowed 1 psionic area per 2 levels of aptitude (or fraction.)
- Psionic characters cannot have a total psionic skill levels in all their skills equal to the product of their modified essence attribute times their psionic aptitude level.
- Psionic characters cannot have a level in any single skill over the average of their modified essence and psionic aptitude level.
- All primary psionic skills have a minimum required psionic aptitude level required to take the ability.
- A character cannot take a specialization that has a higher minimum primary skill level than the character's psionic aptitude level.
- A character's psionic defense score a function of their willpower, essence, and psionic aptitude level.

Cost: As skill with base level of 4.

Note: As the role of psionics vary greatly between SF settings, the GM may alter the beginning level of this ability, allow it to be purchased as an archetype or even open option, or disallow psionics (and thus this ability) totally.

Reputation [X, G, A, O]

Description: A character has a reputation, earned or not, that may be of benefit in certain situations. This ability comes in two types, "good" or "dangerous." Good means that the character is well known for achievements of some sort. This sort of skill can help the character get employment and influence reactions and interpersonal tasks. Assume a +1 EF on reaction checks and interpersonal for each level of ability.

A "dangerous" reputation tends to portray the character as a seedy or threatening character. This may act like a good reputation among some circles, but in high society or law enforcement officials, it would be treated as a stigma.

A purely bad reputation would be treated as a stigma (under drawbacks).

Cost: Good reputations are as skillx5.

Dangerous reputations are as skillx3.

Resist Disease (Categorical) [X, G, O]

Description: A character with this ability is resistant to one or more diseases. Diseases under this skill should be listed in categories. A character with this ability gets a +1 EF on any ability checks against any protected disease, and a +1 attribute modifier against this disease and any related diseases.

Categories: The GM should generate a list of common dangerous diseases.

Cost: As skill. This cost is x1 for a narrow group of diseases, x2 for a broad group of diseases, and x3 for all known diseases hazardous to the character's race. Xeno packages can only use the later two options (either the race is a scavenger race that is relatively immune to microbes originating on its homeworld, or it has a biology that does not foster hazardous microorganisms.) Only levels up to 4 can be taken as an open option.

Resist Toxin (Categorical) [X, G, O]

Description: A character with this ability is resistant to one or more toxins. Diseases under this skill should be listed in categories. A character with this ability gets a +1 EF on any ability checks against any protected toxin, and a +1 attribute modifier against this toxin and any related toxins.

Categories: The GM should generate a list of common dangerous toxins.

Cost: As skill. This cost is x1 for a narrow group of toxins, x2 for a broad group of toxins, and x3 for all known toxins hazardous to the character's race. Xeno packages can only use the later two options (indicating that the character's race is can absorb nearly any material without hazard to their biochemistry) Only levels up to 4 can be taken as an open option.

Resist Pain [X, G, A, O]

Description: A character with this ability is resistant to incapacitation due to pain diseases. A character with this ability gets a +1 attribute modifier to their stun total and to checks to see if they can act due to injury.

Cost: As skill x2. Only levels up to 4 can be taken as an open option.

Resist Disease (Categorical) [X, G, O]

Description: A character with this ability is resistant to one or more diseases. Diseases

under this skill should be listed in categories. A character with this ability gets a +1 EF on any ability checks against any protected disease, and a +1 attribute modifier against this disease and any related diseases.

Categories: The GM should generate a list of common dangerous diseases.

Cost: As skill. This cost is x1 for a narrow group of diseases, x2 for a broad group of diseases, and x3 for all known diseases hazardous to the character's race. Xeno packages can only use the later two options (either the race is a scavenger race that is relatively immune to microbes originating on its homeworld, or it has a biology that does not foster hazardous microorganisms.) Only levels up to 4 can be taken as an open option.

Size Advantage [X, G, O]

Description: A character with this ability is larger than the human average. Each character is assumed to have a *mass rating*. The human average *mass rating* is 6; this corresponds to a mass between 51 and 80 kilograms. This is figured into many figured attributes and provides a modifier to the character's strength.

Cost: As attribute with a base value of 6. The cost, mass rating, and mass of various size modifiers is given in the table below. Only one level may be taken as an open option; any remaining levels can only be obtained through xeno- or geno- packages.

The converse of this advantage is the *diminutive* flaw, c.f. A character cannot take size advantage and the *diminutive* flaw.

Size Advantage Table:

Size Mod	Mass Rating	Cost, CPs	Mass, KG
0	6	0	51 - 80
1	7	14	81 - 127
2	8	30	128 - 201
3	9	48	202 - 318
4	10	68	319 - 505
5	11	90	506 - 800
6	12	114	801 - 1268
7	13	140	1269 - 2010
8	14	168	2011 - 3185
9	15	198	3186 - 5048
10	16	230	5049 - 8000

Speed Reading [X, G, A, O]

Description: A character with this ability can assimilate written information much more rapidly than a normal human. This ability is purchased in levels. 5 levels of skill allow a character to read at 10 times the speed of a normal human. Each level allows the character to read about 1.6 times faster than the previous level.

Speed Reading Table:

Level	Cost, CPs	Multiple of reading speed
0	0	1
1	1	1.6
2	3	2.5
3	6	4
4	10	6.3
5	15	10
6	21	16
7	28	25
8	36	40
9	45	63
10	55	100

Cost: As skill. Only levels up to 4 can be taken as an open option. The below table summarizes the cost and relative speed of various levels of this ability:

Toughness [X, G, A, O]

Description: A character with this ability can withstand more damage than a normal character of their size. Toughness is purchased in levels. A character receives a variety of benefits from their toughness score.

First, a character with toughness treats their toughness score as an inherent AR. This AR is not cumulative with any other ARs except natural armor. Since toughness is typically 3 or less, this is a relatively minor ability, but allows the character to blow off minor attacks such as unarmed attacks.

Second, a character's toughness score is added to their resilience rating and base wound rating.

Third, a character uses their toughness rating as a trait bonus to their endurance rating for the purpose of any shock or incapacitation checks.

Cost: As skill x5. Only levels up to 3 can be

taken as an open or archetype option.

Table A2.2: Master Perks List

Authority	Cyberware	Reputation
Bioware	Henchmen	Vehicles
Contacts	Patron	Wealth

4.3 Perk Descriptions

Authority

Description: This perk indicates that the character wields some sort of authority due to their position within an official organization. Examples could include a branch of the military, a corporation, or some sort of police force.

Having a low rank in such an organization is actually considered a flaw, since such a character will be considered a resource more than command them. The following level shows the basic level of perk and the corresponding military and corporate rank.

Authority Basic Level Table

Level	Military Rank	Corporate Rank
1	E1-E3	Worker
2	E4-E6	Team Leader
3	E7-E9	Manager
4	W1-W4, 01-02	Junior Executive
5	03-04	Executive
6	05-06	Senior Executive
7	07-08	Junior VP
8	09-010	Senior VP, CEO

To this basic level, modifiers must be applied. The GM may apply modifiers of -1, 0, +1, or +2 for each of the following categories: Resources: -1 (local police force) to +2 (interplanetary military); Autonomy: -1 (base security) to +2 (covert agent); Authority: -1 (none) to +2 (interstellar police powers).

Cost: As skill at a base level of 4.

Note: This perk may have a profound impact on the campaign. This perk should fall under

the GM's scrutiny, and should not be taken without the GM's permission. The GM may require the character to take specific templates to take this perk.

Bioware

Description: The character begins the game with one of more items of bio-engineered symbiotic implants. These implants cost the character essence in addition to character points. See the section on equipment for more details.

Cost: See the section on equipment for details.

Note: Not all campaigns will have bioware. Take this perk only with GM permission.

Contacts:

Description: The character begins the game knowing - and having a degree of influence over - a person that may be in a position to help the character.

Contacts are described in two terms - level and reliability. Level is typically in the range from 1 to 5. Level of the contact represents how useful the contact is. This may be in terms of political influence or authority, or in terms of skills the contact can offer.

When expressed in terms of influence, the contact may have rank or a authority up to double the level of the contact (see the *authority* perk). For example, a brigadier general would probably be a level 4 contact. The GM may adjust the level of the contact upwards if the contact's level does not reflect the level of the influence. Often an wily aide or clerk may wield as much power - and be more free to act - as a higher ranked official would.

When expressed in terms of ability, the contact might have a proficiency level up to 4 times the contact level. A level 4 contact might be a bounty hunter with abilities as a character

of PL 16.

In addition to the contact level is the reliability of the contact. This should be treated as an ease factor bonus when requesting a favor of the contact, and typically ranges from 1 to 3.

Normally a character decides what specific contacts the character has when this perk is purchased. However, at the GM's option, a player may choose a contact as "open." This means that the player does not choose what exactly the contact is when generating the character, but during the game when it is more apparent what would come in handy.

If the GM allows this option, the character must pay the total of the contacts level and reliability in karma points at the time the player wishes to utilize the contact. After that point, the contact is no longer "open."

Cost: Buy as a skill of a level equal to the reliability level, multiplied by the contact level. To buy a level 4 contact with a reliability level of 2, it would cost 12 points (3 is the cost of a level 2 skill, times the contact level of 4 is 12.)

Cyberware

Description: The character begins the game with one or more items of cybernetic implants. These implants cost the character essence in addition to character points. See the section on equipment for more details.

Cost: See the section on equipment for details.

Note: Not all campaigns will have cyberware. Take this perk only with GM permission.

Henchmen

Description: The character begins the game with one or more followers that have some degree of loyalty to the character. This is similar to the *authority* perk, but does not come with the attendant obligation to a higher authority.

A character is normally assumed to only be able to have henchmen that are equal to or below the character's own PL.

Cost: Base cost of 3 times the NPC's PL. An additional cost 5 points for 1.6 multiple in the maximum level of followers. For example, an extra 25 points will buy 10 followers.

Patron

Description: A patron is an ally, friend, employer, mentor, and/or benefactor to the character. A patron has abilities and/or resources that can prove very useful to the player.

A patron is rated in terms of resources they control. Most patrons should be considered to start the campaign controlling 1 million credits; some may be much more powerful.

The patron may occasionally require the character to perform assignment to pay for benefits that the patron provides, but generally, the patron and the character should be considered to have similar or coinciding goals, which is why they enter the mutually beneficial relationship to begin with.

Cost: A patron controlling 1 million credits worth of resources costs 15 points. Each additional point increases the patrons resources by 1.6 times, each 5 points increases the patron's relative power tenfold. A 35 point patron would control 100 million credits worth of resources.

Vehicles

Description: The character begins the game with a starship or other vehicle appropriate to the milieu. Starships typically cost in the tens or even hundred of millions of credits.

The scale used for this perk is similar to that used for the *wealth* perk. However, this perk has the advantage that the cost may be split between several characters.

The GM may wish to allow this option to allow the characters to purchase other forms of equipment. In no case should this equipment be immediately liquidatable. If you want your character to start out rich, use the *wealth* advantage.

Cost: 10 points grants a vehicle with a new value of about 10,000 credits. Every additional point allows 1.25 times this figure. Every additional 10 points allows a ship of ten times this figure. At this rate, a 100 million credit starship would cost 50 points.

Unlike other perks, this cost may be split between party members. The split may be negotiated any way available, but the amount each character pays should be representative of the character's stake in the ship.

The above cost is assumed to have the ship financed with a 10% downpayment. The

players may choose to have a higher percentage of the ship payed off buy spending extra point. *Each character* must spend 1 point to multiply this base figure by 1.25. If each character spends 10 extra points, the ship is 100% payed off, and is thus owned free and clear.

Note: Not all campaigns will assume that the players are part owners in a starship. Take this perk only with GM permission.

Wealth

Description: Any starting character is assumed to start the game with 1000 credits in cash. A character may take the wealth advantage to

start with a higher figure than this.

Cost: Each character point that the character spends on wealth multiplies the starting wealth figure by 1.25 times. Each 10 CPs gives the character 10 times the starting wealth of 1000 credits. Thus a character who spends 50 points would have 100 million credits in assets.

It is up to the GM how much of this wealth is actual cash and how much is tied up in assets. One simple assumption is that for each point the character spends on wealth over 5, 2% of the characters wealth is in assets vice cash, up to a maximum of 90%

Table A2.3: Master Psionics List

(*Italics indicates a primary psionic skill. Skills listed under each are the attendant specializations.*)

<i>Antipsionic</i>	Adrenalin Control (4)	Cleave (7)
Psi-Shield (1)	Weapon Bond (4)	<i>Telepathy</i>
Psi-Block (2)	Regeneration (5)	Truthhear (1)
Psi Barrier (3)	<i>Telekinesis</i>	Mind Mask (1)
Psi Backlash (5)	Slide (1)	Distract (2)
<i>Extrasensory</i>	Lift (2)	Sense Mind (2)
Sense (1)	Manipulate (2)	Suggestion (3)
Aura Sense (2)	Push (3)	Empathy (3)
Farsight (3)	Bend (3)	Converse (3)
Object Read (4)	Shield (4)	Mind Read (4)
Precognition (6)	Throw (4)	Confuse (4)
<i>Psychometabolic</i>	Crush (5)	Empathic Implant (5)
Willpower (1)	Impact (5)	Agony (5)
Healing Trance (2)	Chill (6)	Memory Implant (6)
Stasis (3)	Heat (6)	

4.4 Psionic Descriptions

Appendix A3: Flaw Descriptions

Table A3.1: Master Flaws List

Addiction	Dependant	Rage
Age	Diminuative	Sensory Impairment
Allergy	Enemy	Susceptibility
Appearance	Physical Disorder	Synth-nerve Allergy
Compulsive Behavior	Psionic Ineptitude	Uncouth
Deep Sleeper	Psychological Disorder	

4.5 Flaws

4.5.1 Standard Conventions

The scale that is used for skills and advantages is not used for flaws in most cases. Most have three parts: frequency, severity, and impact. The ratings have a number from 2 to 5. To find the final value of the disadvantage, multiply the three numbers together and half the result. This allows the player to take a few minor 4 point “quirks” just for fun. However, to get a large number of points, the player must take some truly debilitating flaws.

The standard ratings for disadvantages is as follows; specific flaws may have alternate scales for these ratings:

Frequency:

2 - Comes into play less than one time per adventure

3 - Comes into play once per adventure

4 - Comes into play more than once per adventure

Severity:

2 - Must roleplay or overcome with Will x10 roll.

3 - Must roleplay or overcome with Will x5 roll.

4 - Must roleplay or overcome with Will x3 roll.

5 - Must roleplay or overcome with Will x1 roll.

Impact:

2 - Minor impact, -1 EF or trait modifier

3 - Major impact, -3 EF of trait modifier

4 - Severe impact, -5 EF or trait modifier or potentially deadly results.

4.5.2 Flaw Descriptions

Addiction

Description: A character with this flaw has a physical or psychological need for a certain substance or other means of stimulation (e.g., electrical stimulation to the pleasure centers of the brain.)

Frequency: Describes how often the side effects or withdrawal symptoms come up; use the standard scale.

Severity: Describes how easy the substance is

to acquire and how easily the effects of the drug are shaken off. Use the standard scale as a measure of addictiveness, and add the following number for availability :

Availability:

-1 - Less than 50 credits per daily dose.

0 - 51 to 100 credits per daily dose.

+1 - Over 100 credits per daily dose.

Impact: Use the standard scale. The listed result is assumed to be effects of using the substance (euphoria, hallucinations, shaking, etc.) or withdrawal symptoms. If you wish to separate the effects of use and withdrawal symptoms, half the point value of the impact for use and for withdrawal and add them together.

Age

Description: The character starts the game at a relatively advanced age. A sort of aging disadvantage is built into the game system in that a character adds a number of dice to their age according their proficiency level. However, this age system assumes individuals that have achieved a fair level of development at a fairly early age; a character with this disadvantage has a little more realistic skill acquisition rate... and will thus be a little older for a given PL.

An aging character will accumulate “aging points.” These points are accumulated at the rate of 1 per 2 years over 30 and one per year over 50. These will tend to reduce a characters statistics as they age. See the player’s manual for more details.

Frequency: Frequency is based on the overall availability of age-retarding products in the campaign. Use the following guidelines instead of those in the general guidelines:

2 - Rejuvenation techniques are generally available in the campaign (generally TL 16+)

3 - Age retarding drugs are available in the campaign (Generally TL 14+)

4 - Anti-aging techniques are generally unavailable in the campaign.

Severity: The severity is based on how old the character is compared to the standard assumptions. Use the following scale:

2- Treat all of the characters age dice rolls as 5s (instead of rolling a d5.)

3 - As above, but add 10 years to the character's starting age.

4 - As above, but add 20 years to the character's starting age

5 - As above, but add 30 years to the character's starting age.

Impact: After you have selected severity, you should determine the character's starting age. The age at which the character will be starting the campaign is a measure of the actual impact:

2 - Starting age is less than 40.

3 - Starting age is 41 - 60.

4 - Starting age is 61 - 80.

Allergy

Description: The character suffers an adverse effect when exposed to certain substances or compounds. These can be things that are products of industry, such as a common coolant compound, or organic compounds associated with specific creatures or pollens. This should not include poisons that are already inimical to the character's race.

Frequency: Use the standard scale.

Severity: Use the following scale

2 - Effects may be prevented by easily available drugs or reduced End x 10 roll.

3 - Effects may be prevented by moderately available drugs or reduced by End x 5 roll.

4 - Effects may be prevented by difficult to obtain drugs or reduced by End x 3 roll.

5 - Effects may be reduced (only) by difficult to obtain drugs or End x 1 roll.

Impact: Use the standard scale.

Appearance

Description: The character is an unsightly or distinctive member of their race. At best, the character is easily spotted and cannot blend into the crowd. At worst, the character is ill-suited to social interactions, as you will repulse members of your race.

This disadvantage is not appropriate to alien species unless they are repugnant to their own species or will not frequently interact with members of their own species. The frequency scale can be used to gauge this where it does apply.

Frequency: This is based upon how broad a group the penalty applies toward.

1- Appearance is merely unusual or distinctive.

2 - Alien appearance in cosmopolitan campaign.

3 - Alien appearance in humanocentric campaign.

4 - Alien and unique appearance.

Severity: This factor determines how easy it is to avoid the adverse effects in personal interactions.

2 - Easily concealable.

3 - Concealable with appropriate skill rolls.

4 - Concealable with technology.

5 - Not concealable.

Impact: Use the standard scale at a -1 to the listed value. The listed modifier is applied to interactions with the affected group. A -1 CS usually just means that the character is unusual. A -5 indicates that the character is horrifying to behold.

Compulsive Behavior

Description: The character has some sort of extreme behavior that is likely to get her in trouble. Examples could include lechery, bigotry, compulsive honesty or impulsiveness, or perhaps something more specific.

Frequency: Use the standard scale. This indicates how often the behavior is to come up. If you hate "Rigelians" and you meet them every session, this might be worth a base value of 3 or 4. If you are not likely to meet them every game, this is worth only 2.

Severity: Use the standard scale may be applied in determining whether the character can overcome the compulsion.

Impact: Use the following:

2 - The behavior can cause social embarrassment.

3 - The behavior can cause loss of money or incarceration by authorities.

4 - The behavior will put the character's life in jeopardy.

Deep Sleeper

Description: The character does not notice things when sleeping and is not easily roused from a slumber.

Frequency: Assume a value of 2.

Severity: Use the standard scale. The listed multipliers are used as willpower or perception checks to rouse from a slumber.

Impact: Even once roused, the character is slow to regain their faculties. The listed modifiers apply the round the character's initiative, combat, and perception rolls the round that the character is wakened and d5 rounds afterwards. The next lower category applies d5 rounds after that, and so on. So a character with the worst deep sleep would suffer -5 for d5 rounds, -3 for d5 rounds, and -1 for another d5 rounds.

Dependant

Description: The character begins the game with family or friends that requires their attention or support, and may become involved in adventures.

Frequency: Use the standard scale. This indicates how frequently the character becomes involved in the campaign.

Severity: This indicates how difficult the dependant is to care for:

- 2 - The dependant is competent.
- 3 - The dependant is weak or challenged.
- 4 - The dependant requires special care.

Impact: This describes what kind of attention the character usually has to foster on the dependants.

- 1 - Economic support (e.g., a poor girlfriend back home).
- 2 - Occasional danger (e.g., a poor girlfriend on a frontier zone).
- 3 - Frequent danger (e.g., a poor girlfriend in a warzone).

Diminutive

Description: This is the opposite of the size advantage. The character is smaller than the human average.

A character may not take more than one level below the racial mass rating for their race. Any other levels must be taken as a xeno-template.

Frequency and **Severity:** Do not use the standard scale. Instead, treat this as an attribute (i.e., a skill at double cost) with a base cost of 6. The meanings of these levels and flaw values are as follows.

Diminutive Flaw Table

Size Mod	Mass Rating	Cost	Mass, LL (kg)	Mass, UL (kg)
-5	1	-40	6	8

-4	2	-36	9	13
-3	3	-30	14	20
-2	4	-22	21	32
-1	5	-12	33	50
0	6	0	51	80

Impact:

1 - The character will outgrow the size levels. The GM will handle this; at most assume that the character will gain 1 size level every 5 years.

2 - The character's size is permanent.

Remember that these are then multiplied by the value from the flaw table and by 1/2.

Enemy

Description: The character has someone powerful most put out.

Frequency: Describes the scale on which the enemy operates, and thus the likelihood that the character will run into his old foes:

- 2 - Limited to a planet or small concourse of planets.
- 3 - Limited to a large concourse of planets.
- 4 - Operates in most or all of a race's extent in interstellar space.

Severity: Just how big of a mistake did you make when you PO'd these folks?

- 2 - Enemy is a single person on par with the player in power.
- 3 - Enemy is a small group on par with the character.

4 - Enemy is a large group and/or very powerful.

5 - Enemy is very large and/or very powerful.

Impact: What does your enemy want from you?

- 2 - To keep an eye on you.
- 3 - To incarcerate you.
- 4 - To separate you into your component atoms.

Physical Disorder

Description: This is a catch-all flaw that can describe a wide variety of limitations in the characters mobility and functionality. Use the standard scales to determine point values.

Frequency: This describes how frequently the disorder affects the character. Characters who have implants that offset the disadvantages should treat the frequency as "1."

Severity: This varies by specific flaw, and depends on how severely the disadvantage affects the character. Some examples are:

- Dyslexia:
 - 2 - Can only read slowly.
 - 3 - Cannot read or write.
- Missing limb:
 - 2 - Fingers
 - 3 - Hand
 - 4 - Arm
- Legs crippled, missing, or paralyzed:
 - 2 - ½ move.
 - 3 - 1/4 move.
 - 4 - Parapalegic.
- Speech impediment.
 - 2 - Quiet or stuttering voice.
 - 3 - Can make sounds but not speech
 - 4 - Totally mute.

Impact: Varies by type. The GM should determine the impact that the defect has on certain tasks or what risks it causes, according to the standard scale.

Psionic Ineptitude

Description: The character begins the game with a psionic ability below the human norm for the campaign. This flaw is not appropriate if the campaign includes no psionics. Additionally, the default assumption is that psionic aptitude is purely a function of a character's race; this flaw cannot be taken without the GM's permission, save as part of a xeno- or geno- package.

See the psionic aptitude ability for details of the effect of the psionic aptitude score.

Frequency: This is according to the frequency of the psionics in the campaign; the GM will decide this. Use the following scale:

- 0 - Psionics are not used in the campaign.
- 1 - Psionics are of minor importance in the campaign.
- 2 - Psionics are of major importance in the campaign.
- +1 - If the character has psionics.

Severity and Impact: Do not use the standard scale. Instead, treat it as a skill with a base value of 4; the resultant "kickback" points are multiplied by the frequency x ½ to find the actual flaw value.

Psychological Disorder

Description: The character has a genuine

psychological problem which may interfere with her daily life, not to mention stressful situations (i.e., adventures) with which the character may be involved.

This flaw is almost a catch-all. It may describe a great number of psychological problems: delusions, paranoia, obsessions, depression, manic-depression (a.k.a. bipolar disorder). Use the standard scales to construct the flaw.

Frequency: Use the standard scale. This indicates how frequently the character's flaw manifests itself, or how frequent the character's behavior limits the character. An agoraphobic, who is afraid of leaving a domicile and interacting would easily constitute a level 4. An triskadekaphobic - afraid of the number 13 - might encounter her stimulus less than once per adventure.

Severity: Use the standard scale. This indicates how easy the disorder is to overcome. For the most part, those who only have low levels of severity would not be clinically be classified as insane - but definitely judged as unusual by others.

Impact: Use the standard scale. This indicates how hazardous the character's behavior is to herself. A triskadekaphobic might make unneeded steps to avoid being placed in room 13, warranting only a 2. However, a dangerous paranoid who is afraid that everyone is out to get him - so shoots at everyone - is asking for trouble. That would warrant a level 4 severity.

Rage

Description: This is a specific subset of the psychological disorder. The character is violent and has difficulty controlling his anger.

Frequency: Use the following scale indicating how frequently the character becomes enraged.

- 2 - The character becomes enraged when in combat or attacked.
- 3 - The character becomes enraged when taunted or threatened.
- 4 - The character becomes enraged when someone sullies their honor in some slight, unpredictable way.

Severity: Use the standard scale. This indicates how easy it is for the character to get a grip on his temper after the object of his ire has been pummeled into submission.

Impact: This describes what measures the

character will take when enraged, and consequently, what kind of danger the character puts himself in.

- 2 - The character will push around or respond in kind the thing that enraged him.
- 3 - The character will physically attack and pummel into submission the thing that enraged him.
- 4 - The character will try to kill the thing that enraged him.

Sensory Impairment

Description: The character has a problem with one or more of her senses, or simply lacks a sense. In aliens, this may be used to represent the fact that they do not have the same senses as humans.

Frequency: Use the following scale, describing how easy it is to overcome the disadvantage. This may be determined by the character's race. An alien who is a member of a race cannot hear will likely never be able to hear despite hearing aids simply because the aliens brain cannot even handle the concept of sound.

- 2 - Methods are available to eliminate penalties to the sense.
- 3 - Methods are available to reduce penalties to the sense.
- 4 - Methods are not available to correct the sense.

Severity: This indicates how important the affected sense is to the character's race:

- 2 - The sense affected is of little or no importance to the race (e.g., smell or taste to humans.)
- 3 - The sense affected is moderately important to the race (e.g., hearing to humans.)
- 4 - The sense affected is of primary importance to the character's race (e.g., sight to humans.)

Impact: Use the standard scale; this indicates the impact on perception checks with the related sense. In addition, severity 3 or 4 senses will affect tasks other than perception tasks as well (e.g., a person with poor sight will have a hard time hitting; the bonus applies in combat in this case.)

- Add this category to the standard scale
- 4 - Total loss of affected sense; no perception checks allowed, related

checks only possible at EF ½ if at all.

Susceptability

Description: The character takes damage - or additional damage - from some conditions. This is usually the result of a xenon- or genotemplate, but may also represent old wounds or glass jaws for relatively normal characters.

Frequency: Use the standard scale. This indicates how common is the condition is that causes damage. A 1 pip body area (leg, arm) is 2 points. A multi-pip body area is 3 points.

Severity: This indicates what conditions cause the damage:

- 2 - Normal combat damage.
- 3 - Relatively slow damaging conditions (heat, cold, radiation.)
- 4 - Normally very slowly damaging conditions.
- 5 - Normally non-damaging conditions cause 1 point of damage per minute.

Impact: This describes how damaging the effect is:

- 2 - Damage x1.25, or 1.6 times as frequent.
- 3 - Damage x1.6, or 2.5 times as frequent.
- 4 - Damage x2, or 4 times as frequent.
- 5 - Damage x2.5, or 6.4 times as frequent.

Synth-nerve allergy

Description: The character has difficulty accepting of utilizing cyberware, due to an allergy to the synthetic nerve material or an excessive immune system reaction.

In addition to the below described disadvantages, all characters with this disadvantage *double* any essence loss associated with cyberware.

Frequency: Assume a value of 1.

Severity: This indicates how severely the character rejects cyberware.

- 2 - The character can only have minor items, totaling an essence loss of less than 1.0 prior to modifications.
- 3 - The character can only have bioware items, totaling an essence loss of less than .5 prior to modifications.
- 4 - The character may have no cyberware or bioware.

Impact: This describes the impact of cyberware on the character. If the character chose a severity factor of 4, assume an impact factor of

4. Use the standard scale, the assigned penalties are applied to any installation routine on the character.

Uncouth

Description: The character is insensitive to the social sensibilities to certain races or cultures. This could lead to embarrassment, social outrage, or hostility on the part of the races in question.

Frequency: Use the standard scale. This indicates how frequently the character offends others. A character with a 2 rating offends a few minor races or cultures. A character with a 4 rating consciously tries to get on the nerves

of everyone, regardless of race, or has a philosophy that achieves the same effect.

Severity: Use the standard scale. This indicates how hard it is for the character to overcome the negative behavior.

Impact: This describes how far the character will "push it."

2 - Will embarrass self.

3 - Will elicit hostilities or legal action.

4 - Will risk deadly confrontation.

The standard scale can be used as reaction modifiers when the character wants to interact socially.

Chapter 5:
Tools of War: weapons and armor

One of the primary modes of conflict in many SF settings is combat. In the future, technology is one of the most telling trappings of the 20th century and will continue to be so some time into the future.

As technology advances, improvements in offensive technology force advancements in defensive technology, and vice versa. No character who expects to find himself on the field of battle should do so unless properly equipped.

5.1 Man Portable Weapons

The following weapons are man-portable weapons developed using the *realistic weapon guidelines* in the GM's guide.

5.1.1 Realistic Weapon Types

Although the SAGE can model a wide variety of bizarre weapons that may appear in science fiction literature, the author can hardly guess what particular weapons various GMs will devise. Accordingly, I have chosen to focus to those weapons I will label "realistic." These weapons either currently exist or are being theorized in some fashion, and appear in a wide variety of science fiction literature and games.

The four major types of weapons are: *chemically propelled round* weapons (or *CPR* weapons), *laser* weapon, *particle beam* weapons, and *railguns*.

CPR weapons describe conventional "guns" that exist today. They typically use a propellant that is ignited, expanding to accelerate a metal slug at the target. This category includes modern pistols, rifles, shotguns, and rockets.

Advanced *CPR* weapons might include caseless ammunition weapons, gyrojets, electrochemical weapons, or liquid propellant weapons.

Caseless ammunition weapons do not use a metallic case to contain the propellant; the propellant is in the form of a solid brick that the slug is embedded into. The case makes the ammunition lighter, allowing a soldier to carry larger amounts of it.

Gyrojets are miniature rockets that are

designed to be launched for man-portable weapons. This reduces the recoil that the user experiences, and may allow a soldier to fire a higher energy round than is available with conventional firearms.

Electrochemical weapons utilize electrical current to ignite, heat, or control the burn rate of a round's propellant. This adds to a weapon's muzzle energy and allows more efficient use of the weapon's structural material, thus the same weapon to fire more powerful rounds.

Liquid propellant weapons use a liquid propellant instead of a solid one. This allows the user to vary the amount of propellant used according to the current need.

The second major category of weapons is *laser weapons*. These weapons use a beam of coherent light to transfer thermal energy to the target.

Similar to laser weapons are *particle beam weapons*, variously known as *particle accelerators*, *particle cannons*, or "blasters." Usually protons are used, accelerated to relativistic speeds, and burn a hole into a target similar to laser weapons. Additionally, particle weapons inflict significant radiation damage to the target.

The final major category of hypothetically plausible futuristic weapons are railguns. Railguns use electric and magnetic fields to accelerate a magnetized slug at a target. Railguns are also variously known as mass drivers, magnetic linear accelerators, or gauss weapons.

5.1.2 Advantages and Disadvantages of Weapons

CPR weapons:

Advantages:

- Do not require bulky power packs
- Less bulky than most comparable weapons at low TLs.
- Higher rate of fire than energy weapons.

Disadvantages:

- Less effective than similar mass weapons at higher TLs.
- Suffer a penalty to DR for high PR.

- Lower rate of fire than railguns.

Laser Weapons:

Advantages:

- Does not require ammunition, only power
- Lighter than equivalent power railguns and particle accelerators.
- Does not suffer the projectile DR penalty.

Disadvantages

- Lower penetration than equivalent energy railguns and particle accelerators.
- More vulnerable to atmospheric conditions than railguns and particle weapons.
- Vulnerable to reflective armor.
- Lower rate of fire than railguns or CPR weapons.

Railguns:

Advantages:

- Lighter than equivalent energy particle beams.
- Higher penetration than equivalent energy lasers and particle beams.
- Less affected by atmospheric effects than lasers or particle beams.
- Ammunition is much lighter and cheaper than equivalent CPR rounds.
- Higher rate of fire than CPR weapons, particle beams, and lasers.

Disadvantages:

- Requires both energy and ammunition to operate.
- Longer than equivalent energy CPR or energy weapons.
- Vulnerable to conventional armor.
- Heavier than equivalent energy lasers

Particle Beams:

Advantages:

- Higher penetration than equivalent energy lasers.
- Inflict radiation damage on target.
- Better at penetrating most armors capable of stopping lasers and railguns.
- Does not require ammunition, only energy.
- Less affected by atmospheric effects than lasers.

Disadvantages:

- Lower rate of fire than railguns or CPR weapons.
- Heaviest of all weapons.
- Lasers have equivalent penetrations (and

- are lighter) at energies less than 5000 j.
- More affected by atmospheric effects than railguns.

5.1.3 Weapon Benchmarks

Starfarer is intended as a broad system capable of covering a variety of different weapon types. The GM's Guide contains rigorous rules for making realistic weapons and armor.

Though these rules are considered to be the standard for weapons in the Starfarer system, many GMs will make a less "hard" setting than warrants use the strict guidelines of the Starfarer weapon construction system. Others may simply prefer to avoid its attendant complexity in favor of an ad hoc approach.

The following is a listing of the PR and DR of a variety of real-world and extrapolated weapons. This should provide GMs with a measuring stick by which to make their own weapons, or compare with weapons made using the weapon construction system.

General Weapons List:

CPR Rounds:

Modern Weapons:

Weapon:	Damage:	Penetration:		
9mm short	5	5		
.357 magnum	7	7		
.32 ACP		5		4
.22 short		5		4
9mm para	7		6	
7.62 NATO	11		9	
.45 ACP		6		6
5.56 NATO	10		8	
.50 cal	15		15	

Advanced CPR rounds:

Weapon:	Damage:	Penetration:		
2mm screamer	9		5	
9mm DS		8		7
10 mm Auto	7		8	
4 mm Police	8		7	
5 mm Electric	9		8	
5 mm Caseless	11		10	
7 mm Assault	11		9	

7 mm DS	12	8
15 mm Shaped	16	13
23 mm DS	16	20

Beam Weapons:

Lasers:

Weapon:		Penetration:
Damage:		
500j 5mm	7	6
1 kj 5mm	9	7
2.5 kj 5mm	11	9
5 kj 5mm	13	11
10 kj 7mm	14	13
15 kj 8.5 mm	15	14
20 kj 9.5mm	16	16

Particle beam weapons:

Weapon:		Penetration:
Damage:		
5 kj 5mm	13	11
10 kj 5mm	16	13
20 kj 5mm	19	16
30 kj 5mm	20	17
40 kj 5mm	22	19
50 kj 5mm	23	20

Mass driver weapons:

Weapon:		Penetration:
Damage:		
2 kj 2mm	13	7
5 kj 2mm	16	9
5 kj 3 mm	15	9
10 kj 2mm	20	11
10 kj 3 mm	18	11
20 kj 2 mm	23	13
20 kj 3 mm	21	13
30 kj 2 mm	26	14
30 kj 3 mm	23	15
30 kj 6 mm	20	16
40 kj 2mm	28	15
40 kj 3 mm	25	16
40 kj 6 mm	21	17
50 kj 2 mm	29	16
50 kj 3 mm	26	17
50 kj 6 mm	22	18

All above specs are for 10:1 iron shells. 2mm shells have optimum RR of 3 (carbine use). 3mm shells have RR of 4 (rifle). 6 mm shells have RR of 5 (heavy weapons). Military weapons can have higher densities and thus

better range characteristics.

5.1.4 Man-portable weapons list

The following weapons were made using realistic guidelines for the *Hegemony / Guild Space* setting. They are included here because they should be applicable to a variety of settings in the “hard SF” vein. See the *Starfarer* GM’s guide for information on designing weapons.

The following notes describe the format of the tables:

PR/DR: Penetration and Damage Ratings of the weapon.

RC: Range Class of the weapon. An “E” indicates that the weapon can fire at extended range.

Recoil: Ratings for 2 hands / 1 hand. For each 2 points of recoil above STR, apply -1 DEX mod to the to hit task for the first shot, and -1 per point difference to subsequent shots unless the character accepts a similar initiative penalty before firing again. If recoil is higher than the character’s resilience, they may also take damage. Note that energy weapons have NO recoil.

BR: If there is an entry here, it will indicate the weapon’s autofire capability. The Burst Rating (BR) is the number of bursts the character can fire in an action. Each burst is resolved as a normal hit from the weapon with a +1 bonus to the task LOS. Bursts cannot benefit from the aiming task. Weapons firing bursts add on e the recoil rating of the weapon per burst. The number in parenthesis is the ROF per second; this is used if you are using the sustained fire optional rule.

Accuracy Mod: Modifier to the character’s skill when rolling to hit tasks using the weapon.

Initiative Mod: Modifier to the character’s initiative rolls when using the weapon as a declared action.

Length: Length of the weapon in centimeters.

Mass: Mass of the weapon, followed by mass of a full ammo load (including the mass of the clip) in kilograms. If there is only one number here, it is an energy weapon with an internal clip.

Cost: Cost of the weapon, followed by cost of

full ammo load (for projectile weapons only), followed by cost of an empty clip. Energy weapons will only list weapon cost

and cost of external energy pack (if any.) Shots: A full normal ammo load for a standard clip for the weapon.

5.14 TL 14 Weapons:

TL14 5mm caseless electric LIR (Light infantry rifle); AB/AT.

PR/DR	RC:	Recoil	BR	Accuracy	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
10/7	3	6/9	4 (21)	+2*	0	77	2.7 / .1	4426 / 16.4 / 10	21
13/8	3	7/10	N/A	+2*	0	(With 2500 J electric boost)			

* Smart Weapon Capability

This weapon uses a 21 round detachable clip of caseless 5 mm ammo. It has electric capability, and can attach to a standard 10 or 20 shot 2500 j laser power pack. It cannot fire in AB or AT mode with electric boost active.

TL14 5mm colonial issue 2500J light laser rifle, SA.

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
11/9	4	N/A	N/A	+3	+1	60	2.7 / 4.1*	1525 / 60*	21

* Ammo mass and cost are for a 10 shot 2500J SC pack. A 20 shot pack is available that weighs 8.1 KG and costs 70 cr. These are rechargeable batteries, not SCs.

TL14 5mm heavy laser /stunner pistol, SA.

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
8/7	2E	N/A	N/A	+2	+1	15	1.0	1370	40
7/6*	1E	N/A	N/A	0	0	(Stun Pulse)			

* Stun pulse, lethality = 4.

TL14 10mm big game rifle, SA internal clip.

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
14/14	4	9 / 14	NA	+2	-1	93	6.7 / .3	1870 / 9.8	10

TL14 3mm Gauss SMG (Railgun)

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
8 / 4	3	3 / 4	2 (10)	+0	+1	22	1.1 / .4	1400 / 8 / 60	50

5.15 TL15 Weapons

CPR:

TL15 2mm "screamer" pistol, SA.

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
6/3	1	4	N/A	0	+2	15	.21 / .02	360 / 3 / 16	20

Laser Weapons:

TL15 5mm 2500J Military Laser Carbine

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
11/9	3	N/A	2 (10)	+2	+1	39	2.1	4290	30

(Internal Power Pack)

TL15 5.5mm 6000J Military Laser Rifle

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
13/11	4	N/A	2 (10)	+3	+1	60	2.3 / 1.6	4460 / 365	30

(Belt Power Pack)

Particle Beam Weapons

TL 15 5mm 2000J Squad Assault Accelerator, AB.

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
19/16	5	N/A	2 (10)	+3	+1	90	4.6 / 6.9	23550 / 2020	40

The weapon is normally equipped to use a 40-shot power pack, but can also be connected to an external generator.

Radiation Damage Rating: 4 (6)

Railguns

TL15 3mm 4000j heavy infantry assault rifle, AB:

PR/DR	RC:	Recoil	BR	Accuracy Mod:	Initiative Mod	Length	Mass	Cost (W/A/C)	Shots
16 / 8	4	5 / 7	5 (32)	+2*	0	60	4.1 / .5	12000 / 7 / 430	50

* The shown cost is for the basic model. A smartgun w/link version with an additional +2 guidance bonus costs 43000 credits.

The clip cost shown is for a disposable detachable battery pack. A rechargeable belt pack is available weighing 2.2 kg and costing 850 cr. The mass shown for the clip is the battery pack; the ammo clip is near negligible at 25 grams. Armor piercing shells are available at x4 cost that have a PR / DR of 19/6.

5.2 body Armor

As the tide of technology makes it easier to kill, so does it provide countermeasures against weapons. Some of these measures are limited in effectiveness since it is, as an axiom, easier to destroy than protect. However any soldier who takes to the ultra-modern battlefield would be remiss in failing to don body armor.

5.2.1 Body Armor Technology

While it is fairly straightforward to guess what types of weapons may dominate the battlefield once the energy storage technology becomes available, guessing what kinds of armor will be able to protect soldiers from such weapons is a little more “up in the air.”

Accordingly, there are a number of assumptions have been made for the core *Starfarer* system. These may or may not be appropriate for the setting your GM intends to run.

The basic assumption is that material technology will advance, producing more effective armor than versions available at previous tech levels. However, within any tech level, there exists light, standard, heavy and extra heavy armor types. Lighter armors are lighter for a given protection level, but must be thicker to compensate.

Armor that will protect against futuristic weapons is fairly massive. Generally, only *light armor* material is used in the construction of body armor.

Standard armor is of limited effectiveness against energy weapons. Accordingly, there are a number of developments that allow armor to deal with such attack modes.

The first is *reflective* armor. This consists of armor with a highly polished reflective surface and heat resistance. This is effective against lasers but nearly useless against other attack modes, including particle beam weapons.

Reflective armor is effective against all visual laser fire at TL 14+, UV laser fire at TL 16+, and x-ray lasers at TL 18+.

5.23 TL13 Armor

Armor Type	Location	Armor Value by Attack Type	Enc. Rating	Mass	Cost
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The next type of special armor is *ablative*. Like reflective armor, this is available at TL 12+. This is designed to stop energy weapon fire, but unlike reflective armor, will also stop particle beam fire. However, it does so by vaporizing, carrying energy away from the target. As ablative armor absorbs energy weapon fire, its effectiveness is reduced.

The final development of anti-energy weapon armor is called *thermal dispersing*, or simply *thermal*. Available at TL 15+, thermal armor is effective against all energy weapon fire by rapidly dispersing energy from the attack.

Also available at TL15+ is *Reflex* armor. *Reflex* armor allows fairly thin armors to become rigid and deflect kinetic attacks by changing properties at the moment of impact.

Bioflex armor becomes available at TL16+. *Bioflex* armor has the same property that *Reflex* armor has, but is also effective against energy weapons. Also, *Bioflex* armor is literally alive, can repair damage to itself, and conforms better to the user, acting like a sort of powered armor, reducing associated armor penalties.

5.2.2 Armor Table Conventions

The following tables list the armor values (AV) of various armor thickness at given tech levels. The thickness is listed in centimeters. All of these armors are light armor materials.

Special armor types are listed under the type of armor that has the given additional thickness of the special armor or type. For example, “2mm / .5mm reflective” armor consists of 2mm of light armor plus .5mm of light reflective coating, for an actual total thickness of 2.5 mm. Where no second number is listed, assume that the armor add on is a the maximum level - 50% for thermal or ablative, 25% for reflective.

These tables include only personal armor and light combat armor. See the campaign guide for powered armor.

		Sharp	Blunt	Pierce	Energy			
1mm light armorcloth	2-10	4	3	2	2	7	4.2	220
2mm armorcloth	2-10	8	5	4	4	10	8.4	440
2mm/.5mm reflective armorcloth	2-10	8	6	5	4(6)	11	4.2	780
4mm Light Personal Vest	2-6	15	11	9	8	8	5.6	190
4mm Light Personal Armor	2-10	15	11	9	8	13	4.2	220
4mm/1mm reflective light personal vest	2-6	17	12	10	8(11)	9	7.0	330
4mm/1mm reflective light personal armor	2-10	17	12	10	8(11)	14	21.0	770
4mm / 2mm ablative personal vest	2-6	17	13	11	15	10	8.4	260
6mm heavy personal vest	2-6	21	16	13	11	10	8.4	280
6mm / 1.5mm reflective personal vest	2-6	21	18	15	13(17)	11	10.5	500
3mm standard sleeves & leggings	7-10	11	8	7	6	10	8.4	190
3mm reflective sleeves & leggings	7-10	13	9	7	6(8)	11	10.5	330
4mm standard sleeves & leggings	7-10	15	11	9	8	11	11.2	250
4mm reflective sleeves & leggings	7-10	17	12	10	8(11)	12	14.0	440
6mm standard helmet	1	21	16	13	11	5	2.8	30
6mm reflective helmet	1	21	18	15	13(18)	6	3.5	50
7mm reflective helmet	1	22	21	17	15(19)	7	4.1	60
8mm standard helmet	1	24	21	17	15	6	3.7	40

5.24 TL14 Armor

Armor Type	Location	Armor Value by Attack Type				Enc. Rating	Mass	Cost
		Sharp	Blunt	Pierce	Energy			
2mm armorcloth	2-10	8	6	5	4	10	8.4	440
2mm/.5mm reflective armorcloth	2-10	9	6	5	5(6)	11	4.2	780
4mm/1mm reflective light personal vest	2-6	17	12	10	8(11)	9	7.0	330
4mm/1mm reflective light personal armor	2-10	18	13	11	9(12)	14	21.0	770
4mm / 2mm ablative personal vest	2-6	19	14	12	16	10	8.4	260
3mm/3mm organic light antishock vest	2-6	18	14	11	10	8	5.5	150

6mm heavy personal vest	2-6	22	17	14	12	10	8.4	280
6mm / 1.5mm reflective personal vest	2-6	22	19	16	14(18)	11	10.5	500
4mm / 4mm organic antishock vest	2-6	21	18	15	13	9	7.2	200
4mm / 4mm / 2mm organic antishock reflective vest	2-6	21	21	17	15(21)	11	10.1	490
3mm standard sleeves & leggings	7-10	12	9	7	6	10	8.4	190
3mm reflective sleeves & leggings	7-10	14	10	8	7(9)	11	10.5	330
4mm standard sleeves & leggings	7-10	16	11	9	8	11	11.2	250
4mm reflective sleeves & leggings	7-10	18	13	11	9(12)	12	14.0	440
3mm / 2mm antishock sleeves & leggings	7-10	17	12	10	9	11	10.1	200
3mm / 2mm / 1mm antishock reflective sleeves & leggings	7-10	17	13	11	10(13)	12.9	12	390
6mm standard helmet	1	22	17	14	12	5	2.8	30
6mm reflective helmet	1	22	19	16	14(18)	6	3.5	50
7mm reflective helmet	1	24	23	18	16(21)	7	4.1	60
8mm standard helmet	1	26	23	19	16	6	3.7	40
4mm / 4mm / 2mm antishock reflective helmet	1	21	21	17	15(21)	6	3.4	50
5mm / 5mm antishock helmet	1	23	23	19	16	5	3.0	30

5.25 TL15 Armor

Armor Type	Location	Armor Value by Attack Type				Enc. Rating	Mass	Cost
		Sharp	Blunt	Pierce	Energy			
1mm reflex armorcloth	2-10	10	4	3	2	7	4.2	440
2mm reflex armorcloth	2-10	14	9	6	4	10	8.4	880
2mm/.5mm reflective armorcloth	2-10	14	10	7	5(6)	11	10.5	1550
3mm reflex armorcloth	2-10	17	13	9	6	11	12.6	1330
4mm/1mm reflective light personal reflex vest	2-6	20	20	14	10(13)	9	7.0	660
4mm/1mm reflective light personal armor	2-10	20	20	14	10(13)	14	21.0	1550

4mm / 2mm thermal reflex personal vest	2-6	20	20	15	15	10	8.4	260
3mm/3mm organic light antishock reflex vest	2-6	19	19	15	10	8	5.5	310
6mm personal reflex vest	2-6	24	24	18	13	10	8.4	570
5mm / 2.5mm thermal reflex personal vest	2-6	22	22	19	19	11	10.5	1180
3mm reflex sleeves & leggings	7-10	17	13	9	6	10	8.4	380
3mm thermal reflex sleeves & leggings	7-10	17	16	12	11	11	12.6	950
4mm reflex sleeves & leggings	7-10	19	17	12	9	11	11.2	510
4mm thermal reflex sleeves & leggings	7-10	20	20	15	15	13	16.8	1260
6mm reflex helmet	1	24	24	18	13	5	2.8	60
6mm reflex thermal helmet	1	24	24	23	23	7	4.2	150
5mm thermal reflex body armor	1-10	22	22	19	19	16	35.0	2890
6mm thermal reflex LCA	1-10	24	24	23	23	17	41.9	3470
7mm / 3mm thermal reflex LCA	1-10	26	26	26	25	17	46.6	3700