

Project Unnamed

Ingvar Mattsson

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Chapter 1

Preface

This is a work of fiction, primarily aimed to amuse. It takes the form of a role-playing game, but I will not give you the standard “this is an RPG, this is how it’s played” in the preface, since I assume my reader(s) are familiar with the basic concepts.

The design of this game is inspired by many sources, one being the SF RPG I started writing sometime 1986, using pencil and paper. It never was any good and never came even close to be completed. It also used a D1000 as its main skill-check roll. I hope atrocities like that will be kept out of this, but the occasional one may creep in.

This rulebook uses SI (metric) units throughout.

For those of you who want to roll up a character fast, please refer to the chapter on character generation, starting on p. 35.

I’d like to extend a big “Thank you” to

- Gideon for beta-testing
- Brian for beta-testing
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1.0.1 Changes

2005-03-02 V1.0 released
2005-03-16 V1.1, sniper rifle added as a weapon (due to PU FSMC splatbook work)
2005-08-09 V1.2, assorted typos, grammatical errors and layouts fixed.

Chapter 2

Character attributes

All characters are defined by attribute statistics and by skills. This chapter will touch on the attributes, both the primary attributes (strength, constitution, agility, precision, intelligence, willpower, perception) and the secondary attributes.

2.1 Physical attributes

The physical attributes are those which resides “in the body” of the character. The physical attributes are strength, constitution and agility ¹.

2.1.1 Strength

Strength is a mix between muscle build and muscle usage. Not all characters with a given strength are built alike, some are bulky and some are just very very good at coordinating their strength. On the whole, a single abstract “strength” stat works quite well.

A normal human has a strength rating of 3-18 (3D6)

Strength will be shortened to **STR**.

2.1.2 Constitution

Constitution measures the integrity of the character’s body. A low constitution can be interpreted as weak bones, possibly over-weight, being prone to twisted ankles, the common cold or similar.

A normal human has a constitution rating of 8-18 (2D6+6).

Constitution will be shortened to **CON**.

2.1.3 Agility

Agility measures the character’s ability to bend, to move gracefully and the like.

A normal human has an agility rating of 3-18 (3D6).

Agility will be shortened to **AGL**.

2.2 Mental attributes

The mental attributes are those who have to do with the mind (and how the mind interacts with the body).

¹There is no attribute for size, it is entirely up to the player to determine the size and mass of her character

2.2.1 Precision

Precision is a measure of hand-eye coordination and how fast a character will learn physical skills. A low precision rating will mean that the character has a harder time learning hand-to-hand combat, carpentry and handling guns.

A normal human has a precision rating of 8-18 (2D6+6).

Precision will be shortened to **PCN**.

2.2.2 Intelligence

Intelligence is a measure of how well a character can think logically and to a degree how well a character remembers things and the like.

A normal human has an intelligence rating of 8-18 (2D6+6).

Intelligence will be shortened to **INT**.

2.2.3 Willpower

Willpower is a measure of how stubborn a character is. It also measures resistance to pain. A character with high willpower can more easily “tough out” pain than one with low willpower.

A normal human has a willpower rating of 3-18 (3D6).

Willpower will be shortened to **WIL**.

2.2.4 Perception

Perception measures how well a character notices things in her environment. A high perception may mean spotting danger before it happens or noticing a dropped banknote in a dark corner. A low perception may mean walking past a dangerous alien, dressed in a flashing pink suit, without noticing.

A normal human has a perception rating of 8-18 (2D6+6).

Perception will be shortened to **PER**.

2.3 Derived attributes

There are some derived attributes, that govern things like fatigue, health and the like. These are derived from a character’s primary attributes, listed above.

2.3.1 Fatigue

Fatigue measures how well a character can stand physical exhaustion. It is, in a way, a measure of fitness. Fatigue starts as CON+STR.

2.3.2 Health points

Health points measure how far from death a character is. When health points (from now on **hp**) reach 0, the character will fall unconscious and she may die if not brought under medical attention within a short time (see section 5.5, p. 25). A character’s hp starts at CON+STR.

Chapter 3

Game mechanics

3.1 Different dice

As you probably are aware, most RPGs are played with dice made out of assorted polyhedra, the ones we will use for this game are the D4 (regular tetrahedron), the D6 (regular hexahedron or a cube), the D8 (octahedron), D10 (not a platonic body, but a semi-regular solid) and D20 (icosahedron). We will also use the D100 and I'd recommend using either a single D10, rolled twice or two D10 in different colours (one can buy D10s numbered 00–90 and if you want to use one of them instead, they do resolve lots of issues about what die represents the 10s). Occasionally, we will refer to other dice.

3.1.1 D5

Using a D10, let 1–2 \rightarrow 1, 3–4 \rightarrow 2, 5–6 \rightarrow 3, 7–8 \rightarrow 4 and 9–10 \rightarrow 5.

3.1.2 D3

Use a D6 and let 1–2 \rightarrow 1, 3–4 \rightarrow 2 and 5–6 \rightarrow 3.

3.1.3 D2

For the D2, we recommend using a D6 and either 1–3 \rightarrow 1, 4–6 \rightarrow 2 or “odd” \rightarrow 1 and “even” \rightarrow 2.

3.2 Skill checks

Skill checks are always done with a D100 and a successful roll is one that is lower than the (possibly modified) skill value used.

Skill modifications are more common in combat than otherwise, but may be used on occasion for non-combat skills.

Always round to the closest whole number if you end up with fractions after applying a modifier. Feel free to consistently round $x.5$ to $x + 1$.

Emma's character *Joanne* is about to roll for spotting hidden things. Joanne's “Spot hidden” is at 56%, but the GM decides that this is a hard roll, since not only is Joanne under fire, but there have been multiple smoke grenades set off. Multiplying 56% by 0.6 gives 33.6%, we round that up to 34%.

Emma rolls 51, thus Joanne fails her “Spot hidden” and will have to try later. Meanwhile, Joanne dashes towards cover.

Table 3.1: Skill modification table

Difficulty	<i>Multiplier</i>
Very easy	1.5
Easy	1.25
Normal	1.0
Hard	0.6
Very hard	0.2
Impossible	0.1

3.2.1 Perfect, special and fumble results

Fumble

If a skill check roll is 95–00 (that is, 100), there is a risk of fumbling. Roll again and if the roll is *higher* than the (unmodified) skill value, the result is a fumble. A fumble is, in general, worse than just a fail (there are more specific fumble rules for combat on p. 25), so a fumbled Spot hidden roll may end up with the character thinking there is a hidden trapdoor where there’s only cracks in the floor.

Note that 00 followed by 00 is always a fumble.

Perfect and special successes

If a skill check roll is 01–05, there is a chance of a perfect success. Roll again and if the roll is lower than or equal to the (unmodified) skill value, the result is a perfect success. If it is higher, the result is a special success.

3.3 Attribute checks

3.3.1 Normal attribute checks

Attribute rolls are used to check for things where there are no applicable skills in the rule book (or when there are suitable skills, but a character doesn’t have the skill in question¹).

An attribute roll is calculated from the relevant attribute and a difficulty multiplier; the result should be rolled under or equal on one D100 to succeed.

Attribute rolls can never be anything but “successful” or “failed”, so there’s no reason checking for fumbles or special or perfect successes .

Table 3.2: Attribute roll modifiers

Difficulty	<i>Multiplier</i>
Very easy	7.5
Easy	6.25
Normal	5
Hard	3
Very hard	1
Impossible	0.5

Emma’s character Joanne is diving towards cover because she is under fire. Unfortunately, there is no skill called “Dive for cover” (we could, possibly, use Dodge, but we won’t), so the GM asks Emma to roll an Easy AGL check.

Joanne’s AGL is 15, that means an Easy check is 94%. Emma rolls 18, so Joanne succeeds in finding cover.

¹This is only applicable for the skills that have no base chance

3.3.2 Opposed attribute checks

Whenever two attributes are set in direct conflict (say, trying to break down a door or lift something extremely heavy), you can use an opposed attribute check. There is a simple formula to calculate the relevant percentage for success, start at 50% for equal numbers and for each step higher (lower) just add (subtract) 5% $[(Att - Def) * 5 + 50]$. Anything lower than 5% or higher than 95% is an automatic fail or success.

To make this faster, refer to this table:

Table 3.3: Opposed rolls percentage table

	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	50	45	40	35	30	25	20	15	10	5	F	F	F	F	F	F
4	55	50	45	40	35	30	25	20	15	10	5	F	F	F	F	F
5	60	55	50	45	40	35	30	25	20	15	10	5	F	F	F	F
6	65	60	55	50	45	40	35	30	25	20	15	10	5	F	F	F
7	70	65	60	55	50	45	40	35	30	25	20	15	10	5	F	F
8	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	F
9	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
10	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
11	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15
12	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20
13	S	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25
14	S	S	95	90	85	80	75	70	65	60	55	50	45	40	35	30
15	S	S	S	95	90	85	80	75	70	65	60	55	50	45	40	35
16	S	S	S	S	95	90	85	80	75	70	65	60	55	50	45	40
17	S	S	S	S	S	95	90	85	80	75	70	65	60	55	50	45
18	S	S	S	S	S	S	95	90	85	80	75	70	65	60	55	50

Chapter 4

Skills and skill resolution

4.1 Skill basics

Skills in this game come in two flavours, skills one rolls for and skills that imply knowledge of a subject matter. The latter skills do not have a “skill success percentage” as such, but rather a skill level, graded 1–5, giving an indication of proficiency. These are marked as “know” in the skill list and have an associated base attribute.

Skill levels can increase in one of two ways, either through explicit training (time-consuming and/or expensive) or through experience. Knowledge skills can only be increased through training or by using “bonus xp”¹.

Every gaming day (that is, day in the gaming world) the first successful skill usage under pressure (which, incidentally, is the only time a skill-check is actually necessary²) gives one xp for that skill. Any perfect skill check (see page 10) gives 1D3+1 xp, even if xp has been handed out for that skill during the same game day.

When gaining xp on a weapon skill, the xp is for that weapon only. Any xp on a specific weapon can be converted to xp for the group weapon skill two-for-one (two weapon-specific xp for one xp on the group it belongs to).

4.1.1 Bonus xp

Bonus xp is a way for the GM to award good role-playing or general helpfulness from the players. As a general guide line, no player should be getting more than 2–3 bonus xp per session and there shouldn't be more than 5–6 handed out in total per session.

4.2 Training and practice

If a character is in training to increase a skill, roll a skill check every three gaming days in training (that is effectively twice per gaming week). Every successful roll gives 1 xp (there can be no perfect or special successes while training). If the character is training alone, use the Hard modifier from the Skill Modification table (p. 10). If the coach is exceptionally good or the character is the sole student for the whole three days, use the Easy modifier from the same table.

If the character is training a skill she doesn't already have or the skill value is lower than the value of the base attribute, use the base attribute instead. For a knowledge skill, use the base attribute times 4.

The highest skill value reachable through training is 5 times the base attribute (knowledge skills have a maximum of 5, no matter what the character's attribute levels are).

¹ Awarded by the GM as a bonus for good playing during a session, bringing pizza to the gaming session or by pure whimsy

² This is not quite true, one still needs to roll for Spot hidden

4.3 Using experience points

Every skill has a base cost that governs how many xp is needed to get a higher skill value. The increment depends on how good one is at the skill at the moment (it's easier to get better fast when one isn't that skilled). Refer to the Skill Increment table.

Knowledge skills are governed by the “knowledge skills” table.

Table 4.1: Skill increment tables

Skill level	Increment	Expected result
0–25	3D4	8
26–45	D10	6
46–60	D8	5
61–70	D6	4
71–80	D4	3
81–90	D3	2
91–95	D2	2
96–99	1	N/A

Knowledge skills	
Skill level	Base cost times
0–1	1
2–3	2
4	3

Note that increasing skill values takes a week of more-or-less rest, so it will most probably happen in natural pauses between sessions (during long travel, say).

Joanne feels she needs to become better at Electronics (she is now at a modest 24%), so she enrolls in an electronics class. She will be in the class for 8 weeks. The first week Emma rolls 69 and 15 for Joanne's checks, gaining 1 xp. Second week Emma rolls 83 and 11, third week 58 and 61 (no xp this week), fourth week 14 and 84 (now a total of 3 xp), fifth week Emma rolls 55 and 41, sixth 77 and 47, seventh 86 and 23 and the eighth week 61 and 12. Joanne now has 5 xp on Electronics and Emma decides a rest is in order.

The first 2 xp used start from 24% (this means using 3D4) and Joanne gains 7%. The second 2 xp used start from 31%, so Emma rolls a D10 for the second increase and rolls a 6, landing Joanne on a total of 37% and one remaining xp (to be used when she's got more experience to use up).

4.4 Buying skills for a new character

You can either use your initial xp to buy skills as normal or you can skip rolling the dice and just go for the expected value for the roll, thus ending up on average the same, but possibly slightly worse or better (it is faster, though, since one doesn't have to roll dice).

There are no limits on what skills a new character can buy, but we urge players to build a character that makes sense, at least for the character you'd want to play.

For some rough guide lines, see the character templates on p. 41.

4.5 Base chance and base attributes

Some skills have more than one base attribute, this means that instead of using any of the listed attributes, one should use the average between the attributes, whenever there's a question of comparing to “base attribute”.

Base chance means this is what all characters has from the word “go” (usually 0 or base attribute, some knowledge skills have base chances, most do not).

4.6 Weapon skills

Weapons are grouped in several major groups (beam pistols, beam rifles, pistols, rifles, edged swords, point swords, knives and clubs). In effect, the skill for a given weapon is found by adding the skill for the base group and the skill for the specific weapon (they are increased as if they were separate). Individual weapons are learned as skills with the same base attribute and base chance as the group, but with a base cost of one lower.

Joanne has Point Swords at 30% and Epée at 30%, making her effective skill with an epée 60%.

4.7 Skill list

4.7.1 Armourer

Attr: INT Base: INT Cost: 2

Attr: INT

The Armourer skill is used for repairing weapons and armour and can also be used for building improvised weaponry and armour. Use the highest skill value of Armourer and relevant weapon skill when field-stripping or cleaning a weapon.

Base: INT

Cost: 2

This skill can also be used to do minor modifications to weapons and armour; specifically a successful skill roll is needed to adjust any power armour to a new wearer (this is normally done in the store when buying a light power armour or by the supply depot for any of the combat armours).

4.7.2 Astrogation

Attr: INT Base: 0 Cost: 3

Attr: INT

Astrogation is the skill of navigating by the stars. This skill is primary used for getting navigational fixes in space and requires access to reference works (star charts and the like) and instrumentation, but it can also be used for navigation on a planet surface.

Base: 0

Cost: 3

4.7.3 Beam pistols

Attr: PCN Base: PCN Cost: 2

Attr: PCN

Weapon skill.

Base: PCN

This skill covers all beam pistols, both usage and care. Apart from a skill-check when attacking, this skill can also be used to speed-reload (effectively instant changing of the power pack).

Cost: 2

4.7.4 Beam rifles

Attr: PCN Base: PCN Cost: 2

Attr: PCN

Weapon skill.

Base: PCN

This skill covers all beam rifles, both usage and care. This skill can also used for speed-reload (effectively instant changing of the power pack).

Cost: 2

4.7.5 Climb

Attr: AGL,STR Base: AGL,STR Cost: 1

Attr:

This skill covers climbing. In general, deduct one fatigue for each minute spent climbing (without rest). It's much harder to rest when free-climbing than when climbing using ropes and crampons

AGL,STR

Base:

AGL,STR

Cost: 1

and the difficulty level should go up as one goes from a slanted wall with nice big grip-friendly gaps to a mountain-side, to a sheer glass wall.

4.7.6 Clubs

Attr: AGL,STR Base: AGL,STR Cost: 2
AGL,STR
Base: **Weapon skill.**
AGL,STR This skill covers the use of all clubs and club-like weapons (chair legs, pool cues, cudgels, maces and the like).
Cost: 2

4.7.7 Combat suit

Attr: PCN Base: 5 Cost: 4
PCN
Base: 5 **Weapon skill.**
Cost: 4

This is the skill of using, fighting and moving around safely in a combat suit (infantry, scout or command suit). This skill also covers basic maintenance (proper intervals between cleaning out the innards, replacing air and water, inserting new food cartridges, swapping power) from the inside and the outside of the suit.

It also covers basic repair work (more involved faults should be handled by someone with the Armourer skill). As a guideline, minor adjustments and lubrication are covered.

When firing the built-in weapons in a combat suit, use this skill as the sole weapon skill. When using close combat weapons, use the *lowest* of the relevant weapon skill and this skill (if the value of “Combat suit” is lower than the base weapon skill, only add half of the weapon-specific bonus).

4.7.8 Computer programming

Attr: know INT Base: 0 Cost: 5
know INT This skill covers all programming-related matters (writing, debugging, analysing and designing code). It doesn’t, really, cover things like “set the VCR clock” or “set a timed recording”. Spreadsheets are borderline programming, it depends on the exact specifics if it’s programming or just computer use.
Base: 0
Cost: 5

4.7.9 Computer usage

Attr: know INT Base: 1 Cost: 1
know INT This skill governs things like “navigate UP”, “find documentation”, “use keyboard”, “use most common applications” (spreadsheets, word processors, at least to a level of “type things in, cut&paste, delete, save to file, open file”).
Base: 1
Cost: 1
 The higher the level of this skill, the more “advanced” things can be expected to be done.

4.7.10 Deep space tactics

Attr: INT Base: 0 Cost: 3
INT This skill is used to get an advantage in space. It is primarily designed to be used sufficiently away from steep gravitational wells, but can be used there too (imagine it is named “deep space and orbital tactics”, though the name is just that bit too long).
Base: 0
Cost: 3
 It covers maneuvering, estimating actions from the opponent, using local features of space for one’s gain and the like.

4.7.11 Demolition

Attr: INT Base: 0 Cost: 2
INT This skill governs the use of primarily explosives to bring down structures. At times, using a bit of chain-sawing to weaken structural members may be advisable. A failed roll means either “structure

only partially collapsed” or “used too much explosives”, at the GM’s discretion. A fumbled roll always means “used much more explosives than needed” and results in debris being hurled for quite a distance. Again, actual damage caused to bystanders is up to the GM’s discretion.

4.7.12 Dodge

Attr: AGL Base: AGL Cost: 1

Attr: AGL

This is a combat skill, but not a weapons skill as such. This is how to dodge, weave and void³ during combat. This is somewhat effective against projectile and beam weapons.

Base: AGL
Cost: 1

A character can attempt one dodge per combat round, no matter if she is attacking or defending. Dodging while doing an all-out attack gets a Hard modifier. On a success, count the dodge as a parry. If parrying and dodging the same attack (and both the parry and dodge succeeds), ignore *all* damage caused to the character. A barely successful parry and a barely successful dodge is good even against a perfect attack. Use the attack and parry table (tab. 5.1 on p. 24) for just a dodge against an attack, ignore all damage done to the attacker and read “falls over” for “defender is disarmed”.

4.7.13 Edged swords

Attr: PCN Base: PCN Cost: 3

Attr: PCN

Weapon skill.

Base: PCN

This skill governs the use of all edged swords. This is swords like sabres, long-swords, broadswords, cutlasses, falchions, Japanese swords and the like.

Cost: 3

This skill does not cover sharpening swords (in general), unless the GM specifically wants it to (there is no sword-sharpening skill, so if one is needed, either let it be covered by one of the two sword skills or create one).

4.7.14 Electronics

Attr: INT Base: 0 Cost: 2

Attr: INT

This skill covers the design, building and trouble-shooting of electronic equipment. With the right tools and raw materials, the character can build almost all electronic equipment, though it may take a while.

Base: 0

Cost: 2

³ “Voiding” is, basically, not having your body intersect your opponent’s blade by small body adjustments, dodging is doing the same, but usually with larger movements. It’s the same as boxing’s “weave”.

4.7.15 First aid

Attr: INT Attr: INT Base: 0 Cost: 2
Base: 0 This is the skill of patching up damaged humans. It covers things like CPR, splintering broken
Cost: 2 limbs, staunching bleeding, patching up damaged lungs and in general stabilising damaged people.
 It does not (per se) help regain lost hp, but will stop hp loss when in negative hp.

4.7.16 Hide

Attr: PCN Attr: PCN Base: PCN Cost: 1
Base: PCN This is the skill of concealment (both of self and of other people or things). If in a hurry, the main
Cost: 1 thing is to be still, very still⁴. A character knows if a roll failed, but if the roll is fumbled the
 character believes she is well-hidden while being more-or-less obvious.

Given a bit of time, structures and other people can be hidden successfully but this may require additional materials (camouflage nets, additional materials to break up the shape of objects, camo paint and the like).

When someone is actively looking for someone (or something) that is hidden, treat each “level of success” as one step harder (that is, a successful “Hide” is a normal “Spot hidden”, a special “Hide” is a Hard “Spot hidden” and a perfect “Hide” is a Very hard “Spot hidden”).

4.7.17 Knives

Attr: AGL Attr: AGL Base: AGL Cost: 3
Base: AGL **Weapon skill.**
Cost: 3 This skill covers the use of and care for knives. It includes sharpening the knife. The limit
 between what is a sword and a knife is somewhat fluid, but for the purpose of having firm rules,
 we’ve placed the dividing line at the machete (with the machete being, barely, in the knife camp).

4.7.18 Language:...

Attr: know Attr: know INT Base: varies Cost: 4
 INT This is the language skill template. The base chance in a character’s native language(s) is 3
Base: whereas the base chance in all other languages is 0.
 varies Language proficiency can be approximately judged by the language table (p. 18).
Cost: 4

Table 4.2: Language skills

Level	Description
0	Does not speak nor understand at all
1	Can make herself understood and understand spoken and written communication. Will have misunderstandings.
2	Can speak and understand the language fairly well, will still have the occasional misunderstanding and lack words for several important concepts
3	Uses the language on the same level as a native, though has obvious dialect or accent.
4	Uses the language well, has only faint traces of dialect or accent, can usually mimic accents and dialect, to a degree.
5	Very proficient in the use of language. Never makes unintentional linguistic mistakes.

⁴The author once managed to “hide” on top of a low wall between a road and a church, by simply sitting still and reading a book, people actively looking for him, knowing he was within 50 metres of roadside managed to pass him by twice

4.7.19 Library usage

Attr: know INT Base: 1 Cost: 1

Attr: know

In short, how to search for information.

INT

Library usage is the skill to approach an information search going either for specifics and widening out or going from a general query and nailing it down. Sometimes, the GM may feel that a percentage roll is needed (say, trying to get hold of information under pressure). In that case, INT times Library usage skill level may be a suitable initial stab at a base percentage.

Base: 1

Cost: 1

4.7.20 Lock Picking

Attr: PCN Base: 0 Cost: 2

Attr: PCN

This skill governs how hard it is to (un)lock locks with mostly physical components without the relevant key. Without a proper lock pick set, add a Hard modifier to all attempts.

Base: 0

Cost: 2

4.7.21 Pistols

Attr: PCN Base: PCN Cost: 2

Attr: PCN

Weapon skill.

Base: PCN

This skill covers the use and care of all pistols and revolvers. It can be used to speed-load pistols, it can only be used for speed-loading revolvers if the character has a speed-loading clip with cartridges. This skill does not cover care of muzzle-loaders, but does cover usage of them.

Cost: 2

4.7.22 Point swords

Attr: PCN Base: PCN Cost: 3

Attr: PCN

Weapon skill.

Base: PCN

This skill covers the use of point swords⁵. It covers both attack and care for the weapons (sharpening points and edges and the like).

Cost: 3

Typical point swords are épée, foil and rapier.

4.7.23 Ride horse

Attr: PCN Base: PCN Cost: 2

Attr: PCN

Riding on and caring for a horse.

Base: PCN

This covers cleaning the horse, spotting if the horse is in need of more qualified medical attention, staying on the horse during difficult maneuvering and calming the horse when it is agitated.

Cost: 2

⁵More correctly, swords whose primary attack is with the point

4.7.24 Rifles

Attr: PCN Attr: PCN Base: PCN Cost: 2

Base: PCN **Weapon skill.**

Cost: 2 This skill covers the use and care of all rifles, carbines and submachine-guns. It does not cover the care or speed-loading of muzzle loaders. It does explicitly cover assault rifles and machine guns.

Not all rifles can be speed-loaded.

4.7.25 Ropework

Attr: INT Attr: INT Base: INT Cost: 1

Base: INT The skill of tying ropes together in a stable configuration. Can be used to construct rope bridges, trussing things up or tying people or objects safely to something. It also covers splicing ropes together and how to undo rope work (it may not be possible to, if the character is actually tied to something).

Cost: 1

4.7.26 Spot hidden

Attr: PER Attr: PER Base: PER Cost: 2

Base: PER To see things that have been obscured (intentionally or not). This is one of the few skills we suggest the GM roll for without showing the player if she succeeded or not. This should be used whenever the character is intentionally looking for something, if just idly walking past something (or someone) obscured, use a PER attribute roll, at a suitable hardness level.

Cost: 2

4.7.27 Swim

Attr: know Attr: know AGL Base: 0 Cost: 2

AGL How to move in and under water. This is a knowledge skill, though there may be situations where a percentage roll is needed. At these times, use either STR or AGL (as appropriate) multiplied with the Swim skill value (feel free to add 1–3 to the swim skill, if it is an easy task).

Base: 0

Cost: 2

4.7.28 Thrown weapon

Attr: PCN Attr: PCN Base: 0 Cost: 3

Base: 0 **Weapon skill.**

Cost: 3 This skill encompasses javelins, darts, throwing knives and throwing axes. Throwing a weapon that is not designed to be thrown will usually end up with the weapon hitting with the flat or just plain falling short.

4.7.29 Throw object

Attr: Attr: AGL,STR Base: AGL Cost: 2

AGL,STR **Weapon skill.**

Base: AGL This throwing skill is a “distance-throwing” skill (throwing grenades, stones and the like), more than a “precision-throwing” skill. If the thrower wants to end up closer than “randomly within a 1 metre radius” of the thing aimed for, roll again and on a successful roll the thrown object ends up within 5 cm from the intended target spot.

Cost: 2

4.7.30 Vehicle:Aircraft (Jet)

Attr: AGL,PER Base: 0 Cost: 4

This skill covers the use and basic maintenance of a jet aircraft. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr:
AGL,PER
Base: 0
Cost: 4

4.7.31 Vehicle:Aircraft (prop)

Attr: PER Base: 0 Cost: 3

This skill covers the use and basic maintenance of a prop aircraft. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr: PER
Base: 0
Cost: 3

4.7.32 Vehicle:Car

Attr: PER Base: PER Cost: 2

This skill covers the use and basic maintenance of a car. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr: PER
Base: PER
Cost: 2

4.7.33 Vehicle:Hovercraft

Attr: PER Base: 0 Cost: 2

This skill covers the use and basic maintenance of a hovercraft. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr: PER
Base: 0
Cost: 2

4.7.34 Vehicle:Lander

Attr: AGL,PER Base: 0 Cost: 4

This skill covers the use and basic maintenance of an orbital lander. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr:
AGL,PER
Base: 0
Cost: 4

4.7.35 Vehicle:Motorcycle

Attr: AGL,PER Base: 0 Cost: 2

This skill covers the use and basic maintenance of a motorcycle. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr:
AGL,PER
Base: 0
Cost: 2

4.7.36 Vehicle:Sail

Attr: INT Base: 0 Cost: 2

This skill covers the use and basic maintenance of a sailboat. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Attr: INT
Base: 0
Cost: 2

NB: With a sail boat, “excessive speed” actually means “in heavy weather”.

If the character also has the ship skill, this is usable for large sail ships.

4.7.37 Vehicle:Ship

Attr: INT Base: 0 Cost: 3

Attr: INT

This skill covers the use and basic maintenance of a ship. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Base: 0

Cost: 3

If the character also has the sail skill, this is usable for sail ships, otherwise it refers to powered ships only.

4.7.38 Vehicle:Spacecraft

Attr: PER Attr: PER Base: 0 Cost: 4

This skill covers the use and basic maintenance of a spacecraft. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

Base: 0

Cost: 4

4.7.39 Vehicle:Speedboat

Attr: AGL,PER Attr: AGL,PER Base: 0 Cost: 2

This skill covers the use and basic maintenance of a speedboats. Under normal circumstances, no skill roll is needed, but in any sort of rapid maneuvering (avoiding obstacles, dodging attacks, trying to shake off pursuers, at excessive speed...), a skill roll is needed.

AGL,PER

Base: 0

Cost: 2

4.7.40 Wilderness survival

Attr: INT,PER Attr: INT,PER Base: 0 Cost: 2

This skill covers foraging for food and building protection from the elements in the wilderness. This skill covers all climates and planets, simply because listing all relevant sub-areas of survival would be long, boring and tedious.

INT,PER

Base: 0

Cost: 2

4.7.41 Zero-G maneuvering

Attr: know PCN Attr: know PCN Base: 0 Cost: 3

How to move around and work in micro-gravity.

PCN

Base: 0

Cost: 3

Table 4.3: Micro-gravity movement skills

0	Can get around, bumps into things and is likely to hurt herself or others. Can not, under any circumstances, attempt combat.
1	Can get around, bumps into things. All combat is with an extra Very Hard modifier.
2	Can get around, is ungraceful. Will occasionally bump into things, but usually just gently. All combat is at an extra Hard modifier.
3	Can get around well. Not graceful, as such. All combat is normal from this skill level and up.
4	Moves around very well in micro-gravity. The character can “herd” people with level 1-2 in this skill.
5	Extremely good at moving around in micro-gravity. All dodging is done with an extra Very Easy modifier. The character can “herd” anyone safely in micro-gravity.

Chapter 5

Combat

Combat seems to be an inevitable thing in all RPGs, so we better have some rules for how it happens. The combat system used is aimed to be as stream-lined as possible, so one can get dramatic tension in the fights. Also note that combat in this system is geared towards being fast¹ and deadly, so one should (if at all possible) avoid ending up in a combat situation.

5.1 The round

Combat takes place in rounds. Each combat round (CR) is approximately 5 seconds long and consists of multiple attempts at attacking and defending, so all “to hit” rules govern a sequence of probes, feints and the like. For projectile and beam weapons, it is more a question of getting the correct aim and trying to predict how the target is moving.

At the very start of a combat, roll for initiative (PER+AGL+D20), highest score goes first (this can be crucial for “one-hit fights”), after the first round treat all attacks as “effectively simultaneous”, though as separate for determining damage to weapons (this means, decide on an order and any weapon that ends up taking enough damage to break will not be usable for attack).

5.2 Weapon skills

Weapon skills fall in one of multiple broad categories, there are also specific weapon skills. (let’s say Emma’s character Joanne has “Point swords” to 30% and further has “Epée” at +25%, giving her a total of 55% at using an épée).

Weapon skills are affected by encumbrance (see p. 29 for exact details, in short anything up to STR x 2 is fine, anything above that gets an extra Hard modifier per started multiple of STR and an extra Fatigue loss per combat round).

5.3 Attacking and defending

With close-combat weapons (swords, knives, staves, body parts and similar), one has effectively three choices: all-out attack, attack and all-out defence. For an all-out attack, apply an Easy modifier (p. 10) to the over-all modified result. For a normal attack, the character can parry one attack without penalty and for all-out defence the character can parry three attacks without penalty.

The character also has the option to dodge. Dodging means applying a Hard modifier when doing an all-out attack, but doesn’t affect a normal attack or an all-out defence. Dodging is useful against projectile and beam weapons, whereas the normal parrying implied in a normal attack or all-out defence isn’t.

¹ “Fast” both in game terms and in actual playing; as stream-lined mechanics as we can make them.

Any successful parry means that the character doesn't take damage from the parried attack. However, to parry a special success, one needs to do a special or perfect parry and to defend against a perfect attack, one needs to do a perfect parry.

Attempting to parry more than the "penalty-free" amount (none, one or three parried attacks) gives an extra Hard modifier for each extra parry attempt, this doesn't affect parry attempts that have already been resolved.

Table 5.1: Attack and parry table

Attack	Parry	Result
Fumble	Fumble	Both parties take full damage from opponent's weapon
Fumble	Fail	Roll fumble for attacker as normal
Fumble	Success	Roll fumble for attacker, add normal damage from defender
Fumble	Special	Roll fumble for attacker, add full damage from defender
Fumble	Perfect	Roll fumble for attacker, add full damage from defender, attacker is disarmed
Fail	Fumble	Defender takes normal damage from attacker
Fail	Fail	No damage
Fail	Success	No damage
Fail	Special	No damage, attacker is disarmed
Fail	Perfect	Attacker takes normal damage from defender, attacker is disarmed
Success	Fumble	Defender takes full damage from attacker, defender is disarmed
Success	Fail	Defender takes normal damage from attacker
Success	Success	No damage
Success	Special	No damage
Success	Perfect	Attacker takes normal damage from defender, attacker is disarmed
Special	Fumble	Defender takes full damage, defender is disarmed
Special	Fail	Defender takes full damage
Special	Success	Defender takes normal damage
Special	Special	No damage
Special	Perfect	No damage
Perfect	Fumble	Defender is instantly killed
Perfect	Fail	Defender takes full damage, no armour
Perfect	Success	Defender takes full damage
Perfect	Special	Defender takes normal damage
Perfect	Perfect	No damage

5.4 Reloading

Reloading takes one round, but most weapons have speed-reloading available (some do not, they're marked as such in the weapons table). To speed-reload (having the weapon usable in the same round), all that's needed is a successful weapons skill check **against the specific weapon skill plus half the group skill**. The number of available uses (charges or projectiles) varies from weapon to weapon and is noted in the weapons table.

5.5 Damage and fatigue

For each three rounds of combat, deduct one fatigue point. When fatigue reaches 0, the character needs to rest for at least five minutes before doing anything else. Continuing fighting is done at two difficulty levels harder than it should've been (anything harder than "Impossible" is an automatic fail). Fatigue points are recovered at the rate of one every two CR. However, if they've reached 0, five minutes of complete rest is needed before any recovery can be made. At the end of the five minute period, fatigue is at half of normal max.

Damage from weapons are taken from hp and when hp reaches 0, the character falls unconscious. If hp falls below 0, the character starts losing hp at a rate of 1 hp every 4 rounds until a successful First aid has been done (equally good is being shuffled into an auto-doc). When hp reaches $-\text{CON}$, the character dies.

² Fatigue and hp can be regenerated. For each minute of not working hard (combat, running, carrying heavy loads and the like), a character regains one fatigue. Alas, hp regenerate more slowly, at 1 hp per day of taking it easy (if completely at rest, the character regenerates 2 hp per day).

5.6 Fumbling

When a character fumbles with weapons, something bad happens. As a GM, feel free to improvise fumbling result or consult the handy weapons fumble table.

Table 5.2: Weapons fumble table

Roll	Result
01-25	Attacker drops weapon
26-40	Attacker drops weapon, flies off D6+6 metres
41-50	Attacker stumbles over own feet, defenceless in next round
51-60	Attacker stumbles over own feet, falls over. Defenceless in next round and takes D4-1 damage
61-70	Attacker hits herself, take normal weapons damage (for projectile weapons, see 26-40).
71-80	Attacker hits friend (if fighting alone, see 61-70) for normal damage
81-90	Attacker armour malfunctions. If she is wearing tech armour, the power starts glitching (-15% to all attacks), if non-tech armour it starts loosening (-1 to protection).
91-95	Attacker falls over and hits herself with her own weapon (even with projectile weapons). D4-1 from fall damage, normal weapons damage.
96-99	Attacker weapon malfunctions. If it is a projectile or beam weapon, there is a 15% chance that the weapon explodes, imparting normal damage. If it's a knife, sword, spear or the like, the weapon simply breaks apart and cannot be repaired.
00	Attacker weapon malfunctions as per 96-99, attacker falls falls over (taking D4-1 fall damage) and attacker's armour malfunctions as per 81-90

² "Taking it easy" means no running, no combat and no heavy carrying; likewise, no long-distance walks.

5.7 Armour

Armour comes in many variations, starting from the old classics like boiled leather, on to modern armour like powered combat suits. Obviously, the protection they offer from various types of damages varies, but we shall gloss that over, for the sake of simplicity³.

Each armour absorbs a number of points of damage, this is called the armour's absorption (**ABS**).

Armour comes in basically two versions, powered and unpowered. Powered armour uses energy cells (see p. 29 for details).

Table 5.3: Armour list

Armour	ABS	Weight	E-cell size
Heavy cloth	1	3–7 kg	N/A
Boiled leather	2	4–8 kg	N/A
Studded leather	3	6–10 kg	N/A
Ribbed leather	4	8–12 kg	N/A
Band mail	4	9 kg	N/A
Chain mail	5	15 kg	N/A
Plate mail	6	20 kg	N/A
Impact-resistant vest	6†	6 kg	N/A
As above, with trauma plates	8	12 kg	N/A
Chameleon suit	2	5 kg	C
Light power armour	5	25 kg	C
Infantry armour	10	150 kg	D
Scout armour	9	170 kg	D
Command armour	12	200 kg	D

†Against projectile weapons only

5.7.1 Powered armour

Chameleon suits and the three types of infantry battle-suits (infantry, scout and command armour) are all powered and the infantry, scout and command suits require power to even move.

A chameleon suit has multiple cameras and colour-changing pixels on it and an on-board computer to mimic and meld into the surroundings as well as possible. It makes hiding two levels easier (makes an “impossible” modifier into a “Hard”, a “normal” into “very easy” and makes for an automatic success for both “easy” and “very easy”). When un-powered, a chameleon suit is light-grey in colour and slightly sparkling and shows up quite well.

The light powered armour also doubles as an environmental suit and has a small level of power amplification, so as to increase the movement speed and physical strength of the wearer. It has no built-in weaponry, but for the purpose of lifting and carrying, add 5 to the wearer's STR.

The battle-suits are worn completely around the user and have compartments for storing concentrated food, water and air (water and air can be topped up from the outside, the food supplies cannot). They also have waste collection units that can be changed externally. They're usable as vacuum suits. They have built-in weaponry (they all have a plasma rifle built-in (continuously charged from the combat suit) and the infantry suit also has grenade launchers built into the back of the suit, shooting grenades forward over the head; some modified models also have anti-personnel mine dispensers), the main difference is that a scout suit is slightly lighter and has a

³A more detailed damage system may be offered in a future supplement, but nothing will require using it

higher top speed than the others and has replaced some of the weaponry with sensors and processing capacity. The command suit has full weaponry, slightly heavier armour (it's also slightly larger than the two others) and is jammed full with positioning gear, a tactical computer and radio equipment.

None of the battle-suits is really “mobile” without a power source, due to their weight.

5.8 Weapons

Weapons come in two major variations, close-combat weapons and distance weapons.

5.8.1 Break value

Close-combat weapons are often used to parry or block and may take damage from it. Given enough damage, the weapon will break. This will be simulated in the game by the abstract “break value” (BV, a number assigned to each weapon).

If in any attack, a weapon is inflicted with more damage than its BV, it will lose 1 from it. If in any attack, a weapon is inflicted with more than 6 damage than its BV, it will break.

5.8.2 Distance weapons

All distance weapons share some characteristics, they have a maximum effective range, they have a rate of fire and they can be fired a given number of times before needing a reload.

Table 5.5: Close combat weapons table

Name	Type	Damage	Weight	BV
Broadsword	ES	2D6+2	1.5 kg	12
Dagger	K	D4+1	0.5 kg	6
Epée	PS	2D6	1 kg	10
Foil	PS	2D6-1	0.7 kg	8
Gladius	ES	D6+2	1.5 kg	10
Katana	ES	2D6+3	1.5 kg	10
Machete	K	D6+2	0.7 kg	10
Rapier	PS	4D4	1.5 kg	11
Sabre	ES	2D6	1 kg	12
Spiked mace	C	D6+2	1 kg	6
Wakizashi	ES	D6+2	1.0 kg	7
PS – pointed sword	ES – edged sword	K – knife	C – club	

Table 5.6: Projectile weapons table

Name	Type	Damage	Weight	Rounds charges	Calibre E-cell	Range	Rate
Glock 17	P	2D6	0.625 kg	16 + 1	9 mm	30 m	8
Laser pistol	BP	2D6	1 kg	30	B	30 m	6
Laser rifle	BR	3D6	3 kg	20	C	250 m	6
Plasma pistol	BP	2D6	0.5 kg	20	A	20 m	3
Plasma rifle	BR	3D6	2 kg	20	B	90 m	3
Mauser rifle	R	3D6	4.5 kg	6	6.5 mm	450 m	3
Sniper rifle	R	3D6	5.3 kg	6	6.5 mm	3000 m	2
Assault Rifle (light)	R	2D6	4.5 kg	30	5.56 mm	450 m	30
BP – Beam pistol	BR – Beam rifle	P – Pistol		R – Rifle		per CR	

<i>Continued from last page</i>							
Name	Type	Damage	Weight	Rounds charges	Calibre E-cell	Range	Rate
Assault Rifle (heavy)	R	3D6+1	5.3 kg	20	7.62 mm	450 m	20
BP – Beam pistol	BR – Beam rifle		P – Pistol		R – Rifle		per CR

5.9 Example combat

Joanne is in a bad situation⁴, she is being cornered by Ondkille, a local thug. Ondkille is waving a knife and threatening to kill her, unless she hands over not only all her weapons and cash, but also the package Joanne is couriering (containing a vaccine for space plague, to be shipped to the planet Borta later the same evening).

Joanne is wearing her re-inforced leather jacket (treat as studded leather) and her trusty épée. She frees her weapon and prepares to attack (she decides not to do an all-out attack, since knives are nasty things).

Ondkille, meanwhile, wears boiled leather (2 ABS) and a dagger (40%, D4+1). His relevant stats are STR: 8, CON: 8, AGL: 10, PER: 13, Fatigue: 16, hp: 16.

As they both prepare to fight, Emma and the GM checks for initiative (5+AGL+PER for Joanne, 19+AGL+PER for Ondkille). With a total of 36 for Joanne and 42 for Ondkille, he goes first. He does a full-out attack, for a to-hit chance of 60% and the GM rolls 17, a successful attack. Joanne tries to parry (point sword 30% and épée at 37% for a total of 67%), and Emma rolls 62, a success. Joanne then attacks back (roll is 97, a possible fumble, a second roll is 5, giving just a fail).

In the next round, Ondkille goes back to just attacking. At a rolled 85, he misses. Joanne, at a rolled 9, hits and Ondkille (rolling 25) parries. Following round sees Ondkille miss (at 83), Joanne hit (11) and Ondkille miss his parry (58). This means he takes damage. Emma rolls 2D6 to see what damage Joanne's sword does and rolls a 9. Deducting the 2 ABS from that lands 7 damage on Ondkille who is now down to 9 hp.

The following round, Ondkille misses his attack (84), Joanne lands her (55) and Ondkille just barely misses his parry with a rolled 41. Alas, the damage this time is only 6, landing Ondkille with a total of 5 hp.

We see similar things in the fifth round, with Ondkille missing (86), Joanne hitting (23) and Ondkille missing his parry (61). This time, Joanne delivers 8 damage, thus bringing Ondkille down to -1 hp. He slowly crumples to the ground and Joanne cleans and sheathes her épée, before moving onwards to the spaceport, carrying her valuable package. Joanne is now at a fatigue of 23.

⁴Joanne's relevant stats are STR: 13, CON: 15, AGL: 15, PER: 16, Fatigue: 28, hp: 28

Chapter 6

Equipment and money

6.1 Encumbrance

Characters are limited in their carrying capacity. The more load, the less effective one can move. This, mostly, affects combat. Top load for normal function is STR x 2 (so, with a STR of 11, a character would be able to carry up to 22 kg without any adverse effects, given that it's suitably well distributed). For every completed or partial multiple of STR beyond 2 there is an extra Hard modifier to all weapon skills and one extra fatigue lost per combat round.

6.2 Energy cells

Energy cells come in a variety of sizes. In general, a bigger cell contains more energy than a smaller cell, though equipment powered by larger cells may drain the cell at a higher rate. Approximate sizes for each type of cell is given below.

Table 6.1: Energy cell descriptions

Type	Weight	Size	Typical usage
A	50g	3 cm x ∅1 cm	Flashlights, portable igniters, larger clocks and the like
B	100g	17 mm x 26 mm x 44 mm	Weapons, long-term low-powered items, radios, cell phones and the like
C	0.5 kg	10 cm x 10 cm x 10 cm	Some weapons, larger computers, environment suits
D	2 kg	0.3 m x 0.1 m x 0.15 m	Combat suits, vehicle-carried beam weapons
E	20 kg	1.0 m x 0.3 m x 0.3 m	Vehicle power source

6.3 Money

The monetary unit used all throughout Settled Space is called the Credit (or **Cr** for short). There are local currencies in some places¹, but the Credit is usable all over Settled Space.

There are four categories of “available money”. There’s the obvious, cash in hand (effectively what the character has in her purse). There is “cardable money” (that is, money available on a cash-card or credit arrangement). There’s also two types of “money in the bank”, short-term and long-term banking. Short-term banking is funds that can be converted to ready cash on short notice (think “minutes to hours”) and long-term is assets that can take up to a month to convert to ready cash (stock certificates, bonds, property). Depending on the detail level of the on-going campaign, it can be important to keep track of available money.

6.4 Equipment

It’s not possible to list all possible things, so the equipment table should be taken more as a guideline than as an exhaustive authoritative list. Note that prices may vary, due to local availability (and the GM’s whim).

Table 6.2: Equipment

Item	Weight (kg)	Cost (Cr)
Air tank, SCUBA	4	100
Air tank, combat suit	6	800
Air tank, refill	N/A	80 – 200
First-aid kit	0.5	25
Lockpick, electromechanical	1	1500
Lockpick, electronic	0.2	3000
Lockpick, mechanical	0.1	500
Power cell A	0.05	1
Power cell B	0.1	5
Power cell C	0.5	20
Power cell D	2	100
Power cell E	4	250
Rations, 1 day	0.5	30
Rope (30 m)	4	60
Toolkit	1	45

Air tank refills vary in cost, depending on the exact air mix.
 Toolkits contain a screwdriver, allen and torx bits, hex sockets.

¹Some of the orbital colonies are experimenting in a oxygen standard, with a floating exchange rate to the Credit and some Earth nations still use their historical currency, usually with a fixed rate to the Credit

Chapter 7

Space

7.1 Settled space

Most humans live on or in orbit around Earth. There are settlements on the moon (Luna City, Lunatic Republic of Liberia) and a terra-forming project is active on Mars, with around 10 000 locally-settled workers with families. The asteroid belt has a few hundred settled asteroid cities (totalling about 300 000 people, all in all).

The bulk of humanity lives in the solar system, but there are agricultural colonies and mining colonies in other star systems. There are also military training facilities and staging posts dotted around nearby star systems. Human-settled areas are sometimes referred to as Settled Space, though there has been some movement renaming them to Solar Federation.

There are alien species, though there isn't much interaction between humans and aliens (there is some, though it's usually only in space-ports, space docks and the like). The most prominent alien species in Human space is the Ape-cats (see p. 40).

7.2 Space travel

The simple space travel rules say “roughly 36 hours from planet to moon”, “roughly 3-6 months from planet to planet” and “interstellar travel needs to get out of the gravity well before warping, so call it 72 hours each end and three days in warp (for a total of 9 days)”. Warp drives require a relatively shallow gravity gradient on both “warp out” and “warp in” points, so cannot be used too close to large masses. Additionally, when warping to inside the same gravity well, the uncertainty in exit point is magnified, so it is unwise to warp within a given solar system (it is done, occasionally, however).

7.3 Spaceships

There are two main types of spaceships, surface-to-orbit and planet-to-planet. the first type has powerful checmical rockets, to generate enough boost to leave a planet surface and thick, heavy heat shields to protect the vehicle during re-entry.

7.3.1 Landers

Landers come in two basic sizes. The smaller size, suited for 12-16 passengers, can take small amount of cargo (some 10-25 kg per passenger) plus two pilots. The larger size is mostly used for shifting cargo from space to the surface. Load capacity max 23 tons or 40 m³. Large landers have two pilots.

Large landers can take passengers, but they usually lack passenger seats, so it can be problematic for take-offs. There is modular seating available for emergencies, though. With the cargo bay converted completely to passenger service, it can seat a maximum of 20 passengers.

7.3.2 System ships

System ships come in a multitude of sizes, though the normal disposition is to be composed of one or four spheres (in the latter case, enclosed inside a larger sphere). Most warp ships are designed to function both as passenger ships and cargo ships at the same time. When composed of four sub-spheres, the normal space-allocation is “one sphere for command and crew, one for passengers, two for cargo”, though this varies. A normal “sphere section” (either a complete ship or one-of-four) comes in one of 3 sizes: 6m, 10m or 15m radius, for a total volume of 900 m³, 4 100 m³ or 14 000 m³ of space.

Maximum freight mass for intra-system engine only regulates maximum acceleration (and thus travel time). Warp engines have an upper weight limit, depending on the engine. If the ship is over this mass, the warp engine will not work.

Ships can move either via warp drive or by using intra-system engines (not unusually ion engines). One reason why intra-system hops is usually done via system drive in normal space, rather than warping is that short-distance warping near stars is unreliable, position-wise, so it'd be safer warping out and then back in. Though that would be *much* more costly than going there by warp (fuel costs for a single warp is the same as about four months of continuous thrust with the standard ion engine). Fast courier ships usually do a double warp¹, to minimize travel time (at the expense of cost).

7.4 System ship construction

Designing a system ship is (basically) down to deciding “one sphere or four” and the sphere section size, then decide on what to stick in it. At a minimum, a system ship needs one galley, air purification units and an intra-system drive. Warp drive, lander bays and the like are recommended, though, and will be found on most ships.

Table 7.1: Space ship hull table

Section size	Single sphere		Four spheres		Hull section cost
	volume (m ³)	weight (tons)	volume (m ³)	weight (tons)	
6 m	900	70	3600	630	10 000
10 m	4200	200	17000	1800	35 000
15 m	14000	440	57000	3900	70 000

¹Some pilots do a single warp, since that saves checking position exactly at the remote end before warping back, saving somewhere between 3h and 36h depending on how far off target the landing was and the skill of the navigator, plus the 3 days of the actual warp

Table 7.2: Space ship engine table I

In-system engines			
Engine	Weight range (t)	Volume	Cost
In-system A	0-250	30 m ³	30 000
In-system B	175-500	40 m ³	40 000
In-system C	400-1 000	55 m ³	70 000
In-system D	800-2 000	120 m ³	150 000
In-system E	1 800-5 000	250 m ³	300 000
In-system F	4 000-10 000	500 m ³	650 000

Table 7.3: Space ship engine table II

Warp drive engines			
Engine	Max weight (t)	Volume	Cost
Warp A	300	15 m ³	100 000
Warp B	700	20 m ³	120 000
Warp C	1 500	30 m ³	150 000
Warp D	4 000	45 m ³	180 000
Warp E	10 000	65 m ³	220 000
Warp F	25 000	90 m ³	260 000

Table 7.4: Space ship additional facilities

Facility	Size	Space use	Weight	Capacity	Cost
Air purifier	large	60 m ³	2 tons	40 persons	6 000
Air purifier	medium	45 m ³	1.5 tons	20 persons	8 000
Air purifier	small	30 m ³	1 ton	10 persons	10 000
Cabin	1, basic	12 m ³	N/A	1 person	700
Cabin	2, basic	18 m ³	N/A	2 persons	800
Cabin	4, basic	24 m ³	N/A	4 persons	900
Cabin	1, luxury	24 m ³	N/A	1 person	950
Cabin	2, luxury	32 m ³	N/A	2 persons	1 100
Cargo foam	N/A	N/A	5 kg / m ³	N/A	30 / m ³
Galley	small	15 m ³	1 ton	6 persons	750
Galley	large	30 m ³	1.5 tons	20 persons	3 000
Lander bay	small	200 m ³	N/A	1 small	15 000
Lander bay	large	300 m ³	N/A	2 small / 1 large	25 000
Laser battery	light	30 m ³	1 ton	N/A	35 000
Laser battery	heavy	45 m ³	1.5 tons	N/A	45 000

Chapter 8

Character generation

8.1 Generating a character

Generating a character involves the following steps:

1. Decide on a race (see the Character Races chapter, p. 39), for descriptions and attributes)
2. Roll your attributes
3. Decide your skills (either by using a “pre-prepared” package or by buying skills from base chances)
4. Acquire equipment (tools, provisions, clothes, weapons, vehicles...)

At some point, you should decide on a name and a gender for your character (the latter may not always be necessary, depending on gaming group, GM and actual race of the character).

8.2 Rolling attributes

There are three recommended ways of rolling for attributes, called “the harsh way”, “the gentle way” and “the path of choice”.

8.2.1 The harsh way

Roll once for each attribute, write down the result, live with it.

Ingyar is about to create a new character and has decided on a standard human. He decides on using the harsh way for generating stats and starts rolling...

STR: 11
CON: 10
AGL: 12
PCN: 10
INT: 13
WIL: 14
PER: 12

8.2.2 The gentle way

For each attribute, roll twice, pick the result you prefer.

James is about to create a new character and has decided on a standard human. He decides on using the gentle way for generating stats and starts rolling...

Rolls			pick
STR	7	6	7
CON	12	12	12
AGL	10	13	13
PCN	10	16	16
INT	11	14	14
WIL	12	12	12
PER	14	9	14

8.2.3 The path of choice

Roll for all attributes once and write them down. Re-roll up to three results and replace them with the newly-rolled results. Sum all results up and distribute this total over your stats, making sure they are within the limits of the maximum and minimum possible result for each stat.

Rachel is about to create a new character and has decided on a low-G human. She decides on using the path of choice for generating stats and starts rolling...

Initial rolls were: 2D6+3, 9; 2D6+6, 12; 2D6+6, 13 2D6+6, 15; 2D6+6, 16; 3D6+2, 12; 3D6+3, 12 and Rachel decides to re-roll the 2D6+3, the 3D6+3 and the lowest 2D6+6. She rolls 11, 12 and 13 for a total of 92. She can now assign stats for a total of 92 points to her low-G human character.

STR	10
CON	13
AGL	12
PCN	13
INT	16
WIL	15
PER	14

8.3 Initial skills

As mentioned on p. 14, initial skill values are generated by using the character's initial xp to buy skills from base chances.

Ingvar prepares to generate skills for his character. He has 200 initial xp to distribute for skills. He has decided to go for a space trader-mercenary-type character.

In the end, the skills look like as follows:

Skill	%
Armourer	52
Astrogation	45
Beam pistols	38
Beam rifles	40
Climb	12
Clubs	12
Combat suit	45
Computer usage (know)	3
Deep space tactics	34
Demolition	33
Dodge	49
Edged swords	10
Electronics	20
First aid	36
Hide	10
Knives	38
Language: English (know)	3
Library usage know	1
Pistols	34
Point swords	10
Ride horse	10
Rifles	10
Ropework	30
Spot hidden	26
Vehicle:Car	12
Vehicle:Lander	48
Vehicle:Spacecraft	50
Zero-G maneuvering (know)	2

Chapter 9

Character races and skill templates

9.1 Human variations

9.1.1 Standard Human

Attributes:

STR	3D6
CON	2D6+6
AGL	3D6
PCN	2D6+6
INT	2D6+6
WIL	3D6
PER	2D6+6

Initial xp: 200

Standard humans are 1G-adapted, normal-stock humans. Normal Earthlings, so to speak. Average height is in the 1.7–1.9 m range.

9.1.2 Low-G Human

Attributes:

STR	2D6+3
CON	3D6+2
AGL	2D6+6
PCN	2D6+6
INT	2D6+6
WIL	3D6+3
PER	2D6+6

Initial xp: 250

Low-G humans are most commonly found on Luna, in one of the lunar cities. They have access to slightly better medical facilities than standard human and are well-known for their stubbornness. Schooling at Luna starts at a younger age and goes on for longer (thus, more skill

points for a beginning character). The lower gravity during childhood does, alas, lead to a slightly lower strength than Earth average.

9.1.3 Zero-G Adapt

Attributes:

STR	2D6
CON	3D6
AGL	3D4+12
PCN	2D6+6
INT	2D6+6
WIL	3D6
PER	2D6+6

Initial xp: 275

Zero-G adapts are a genetically modified variant of human. They commonly live in asteroid cities in the asteroid belt, though there are some that live in micro-gravity manufacturing stations in Earth orbit.

Zero-G adapts tend to be thin and not that muscular, since there isn't much of a need for raw strength in Zero-G. All Zero-G adepts start with the skill Zero-G Maneuvering (see p. 22) at level 4.

9.2 Aliens

9.2.1 Ape-cats

Attributes:

STR	D6
CON	2D6
AGL	D6+12
PCN	2D6+6
INT	D4
WIL	D4
PER	D6

Initial xp: 30

This is a collective organism, with several inter-member communication paths within a “pack” (usually composed of 10-30 males, 5-20 females and 0-20 young of either sex). The stats given above is for a typical individual member, the pack collective is above-average intelligence and is very well-coordinated and perceptive. Up to about 6 m, they employ what seems to be some sort of telepathy or ESP, up to about 15 m, they use ultrasound. It seems as if a limited relaying can be done between pack members, packs have been observed spreading up to 10 m in diameter before the ultrasound communication starts¹.

The male individual members are vaguely humanoid, with a tough leathery brown skin, they usually walk upright, but occasionally knuckle-walk or move on all four. The females are cat-shaped and usually move four-legged, though they can grip and manipulate things with their forepaws.

¹For gaming purposes, allow one relay hop, this makes the maximum diameter 12 metres. The more “comms load” on a relay, the less that pack member can actually do

Little is known about the home planets of this species, though observation of Ape-cat packs in action seems to indicate that the local gravity is probably slightly higher than 1G. It is believed that there are 100–300 packs in Settled Space at any given time. Ape-cat packs have a good intuitive understanding of mechanics and occasionally take hire as mechanics when in Settled Space.

9.3 Skill templates

The skill templates are listed with a description of each template and a list of “default skills” (these will take up a varying amount of the skill points total and may well be increased on). It will just list the number of increments, rather than a finished value, since base chances are (in general) dependent on the stats of the character.

Using a skill template is optional, but they’re provided to give some sort of “minimal level” for the professions listed. Building up skills from scratch is encouraged.

9.3.1 Body guard

The body guard template covers body guards, security and similar work roles, where open conflict isn’t the rule of the day.

Table 9.1: Body guard skill template (42)

Skill	increments	average	
Beam pistols	3	35	
Pistols	3	35	
Spot hidden	4	41	Total cost: 42
Thrown weapon	2	16	
Vehicle:Car	5	47	
Zero-G maneuvering	2	2	

9.3.2 Courier

Couriers transport items and documents from point A to point B, making sure they arrive without having been tampered with.

Table 9.2: Courier skill template (27)

Skill	increments	average	
Armourer	1	21	
Beam pistols	2	29	
Computer usage	1	2	
Dodge	2	27	
Hide	2	29	Total cost: 27
Knives	1	19	
Library usage	2	2	
Pistols	2	29	
Point swords	1	21	
Spot hidden	2	29	

9.3.3 Gambler

Gamblers live by trusting their luck, skill and poker face. Not one for taking un-necessary risks, they do land in trouble from time to time.

Table 9.3: Gambler skill template (20)

Skill	increments	average	
Computer usage	1	2	Total skill cost: 20
Dodge	2	27	
Electronics	2	16	
Knives	3	33	
Spot hidden	2	29	

9.3.4 Journalist

Journalists earn their living by finding things out (and usually by publicising what they find).

Table 9.4: Journalist skill template (53)

Skill	increments	average	
Computer usage	3	4	Total cost: 53
Language:Other	3	3	
Language:Native	2	5	
Library usage	4	4	
Spot hidden	3	35	

9.3.5 Police

To preserve the law and order! This is a policewoman's lot in this world. Trained in first aid, driving and the use of firearms, police often move on to other, more ... lucrative jobs².

Table 9.5: Police skill template (49)

Skill	increments	average	
Computer usage	2	2	Total cost: 49
Library usage	1	2	
Dodge	2	27	
First aid	4	32	
Pistols	3	35	
Spot hidden	3	35	
Vehicle:Car	8	62	
Vehicle:Motorcycle	4	32	

²Like security in Luna City or on orbitals

9.3.6 Private investigator

Private investigators find things out, then keep quiet (or tells a select few) about what they've found out. This is a high-risk profession; filled with long, boring stake-outs.

Table 9.6: Private investigator skill template (36)

Skill	increments	average	
Beam pistols	3	35	
Computer usage	2	3	
Dodge	3	33	Total cost: 36
Library usage	4	4	
Pistols	3	35	
Ropework	2	29	
Spot hidden	5	47	

9.3.7 Soldier of fortune

Guns for hire. These individuals often find themselves in troublesome spots, due to the fact that being there is what earns the bread. Usually well-equipped on the weapon side, they can be an asset for any group set on causing harm.

Table 9.7: Soldier of fortune skill template (58)

Skill	increments	average	
Armourer	2	29	
Beam pistols	2	29	
Beam rifles	2	29	
Climb	1	19	
Combat suit	5	41	Total cost: 58
Demolition	2	16	
Dodge	2	27	
Knives	4	39	
Pistols	1	21	
Rifles	2	29	
Ropework	1	21	

9.3.8 Trader

Traders earn their money by buying cheap and selling dear. Most traders are sole operators or work for small trade associations. They usually have access to space ships (either their own or one leased from a trade association).

Table 9.8: Trader skill template (99)

Skill	increments	average	
Computer programming	4	4	
Computer usage	3	3	
Library usage	2	3	
Beam pistols	3	35	Total cost: 99
Deep space tactics	4	32	
Point or Edged swords	4	41	
Vehicle:Lander	3	24	
Vehicle:Spacecraft	5	38	

Chapter 10

History and timeline

10.1 Timeline

10.1.1 2010

Some odd phenomena, later named “magic” are discovered by a student at the University of Linköping, Sweden.

10.1.2 2012

The study of magic goes from being a student past-time to something studied academically. the three universities who start are Linköping University, The Royal Institute of Technology in Stockholm and MIT in Boston, USA.

10.1.3 2014

Volvaab and Partena merge and form Volvaab-Partena.

10.1.4 2017

The United Kingdom of Great Britain and Northern Ireland fraction into the Kingdom of England, the Principality of Scotland and The People’s Republic of Wales.

Northern Ireland becomes a nation of its own, in a free-trade non-aggression pack with the Republic of Ireland.

Volvaab-Partena forms the Volvaab-Partena Corporate State from what used to be the Swedish west coast.

10.1.5 2018

The United States of America launch the first industrial large-scale satellite, named “Industrial Space Platform”.

The Netherlands split up into Frijsland, Holland and The Netherlands.

10.1.6 2019

Industrial Space Platform is a thriving success and claims itself to be a sovereign country under the name “Orbitalia”.

The Isle Nation splits loose from the Kingdom of England.

Hawaii secedes from the continental USA and form a mutual defence pact with Orbitalia.

10.1.7 2020

Belgium fractures into The Flemish republic and Belgique.

10.1.8 2025

Stockholm splits from the rest of Sweden.

10.1.9 2026

The Kingdom of Sweden splits into the Republic of Jämtland, The Swedish Republic and The Kingdom of East and West Gothia.

Italy fractures to a loose alliance of city states. The Vatican State of the Holy See formally joins the Swiss Republic.

In November, the United Nations formally disband.

Luna City is established.

10.1.10 2027

After a threat of war in Europe, several European states form the Nation Alliance and place “formally neutral ground” as one of their main missions.

Orbitalia have built 10 daughter stations and there is talk of either becoming a loose association of satellite states. A mission to mine the asteroid belt is launched.

10.1.11 2035

In a scientific breakthrough, the first warp drive is built. After four successful trips, the first test ship fails to return from the fifth. It is presumed lost or destroyed.

10.1.12 2036

In the first “very rapid hostile take-over”, Chaos Cola Company is formed and starts on the process of reforming Texas into a corporate state.

The Free Stockholm Mercantile Corps start accepting contracts for military actions, area or person protection and “difficult courier assignments”.

10.1.13 2037

Ares City is the first established Mars colony, starting the slow process of terraforming Mars.

Around 15 000 citizens of the USA join forces to establish a city-state on the Moon.

10.1.14 2040

The Luna Libertarian Nation is formally announced and building of their first lunar dome is started.

10.1.15 2043

Luna Libertarian Nation starts inhabiting their first dome and within three weeks, there’s a schism between “The Libertarian Fraction” and “The Objectivist Fraction” (as the press calls them). It almost gets to the point of civil war at a couple of points but after some mediation, things settle down again.

After lengthy talks, it is decided that NA will take responsibility for law enforcement in Earth orbit. After the first arrest inside Orbitalia’s main station their jurisdiction is limited to the outer surface of space stations.

10.1.16 2060

After quite a few large corporations have set up their own corporate states and quite a few nations have fractured into smaller nations, the surface of Earth is populated by 75 corporate states and 890 non-corporate states. The Nation Assembly has a membership of 920 nations (60 corporate and 860 non-corporate).

10.2 Background

This game is set in more-or-less our world in the year 2082. The obvious differences between the world of this game and our world is that in the game magic works and there is a thriving space-based economy.

Less obvious is the political state of the world. The world of Project Unnamed has far more nations than exists today. As an example, today's United Kingdom has fractured into the Kingdom of England, The Free Principality of Scotland, the People's Republic of Wales, The Isle Nation of Man and The Channel Islands Republic.

One thing that has started to appear in the world of Project Unnamed is company states with the most obvious example being The Free State of Volvaab-Partena (occupying what today is the west and south coast of Sweden).

There are also some nations (most notably the city-state of Free Stockholm) specialising in an assortment of security services. Free Stockholm have bonded citizens providing anything from simple bodyguard jobs, via courier services, all the way up to full-scale regiments ready to slot in to your mercenary force of choice.

10.3 Large-scale politics

Most nations have representation in the Nation Assembly, a supernational cooperation forum that took over after the United Nations were disbanded in 2027. NA doesn't have any power per se, but functions as commonly accepted "neutral ground" for negotiations. NA have published some guidelines for what constitutes "not indecent warfare" (limiting combatants from using poison, biologicals and nuclear weapons).

NA operate a small police force patrolling Earth's orbit, on the grounds that no nation actually wanted the job (or at least not wanted to be seen wanting the job), though their jurisdiction stops at space station hulls and on the surface of the moon.

There is a thriving minority of NA delegates that are pushing for Settled Space to become the "national border" for NA and rename both NA and Settled Space to the Solar Federation. This is not very popular with the orbital nations nor the Luna settlements. It also finds some Earth-based nations being very disturbed.

10.4 Large corporations

Quite a few large corporations have formed nations of their own, so as to be less taxed and to have a political climate perfect for the future growth of the company.

10.4.1 Volvaab-Partena

Volvaab-Partena is a merger of on one hand Volvaab (in turn, a merge of Volvo and Saab) and on the other Partena, a Swedish company that used to be in the "service industry" and slowly started buying up other companies (among those, weapons manufacturer Bofors).

Volvaab-Partena broke loose and formed the Volvaab-Partena Corporae State on what used to be the Swedish west coast in 2017, the first corporate state to spring into existence. VP specialises in the manufacture of vehicles and arms (including armed vehicles) and sells to most anyone who

wants to pay their prices. They do, to a degree, frown on reselling of their arms, since that means less profit for them and do frequently take out contracts with the Free Stockholm Mercantile Corps to...discourage resellers. While VP is happy selling arms to anyone, they will jack prices up for anyone involved in an open conflict. On the other hand, they do deliver to a spot of the buyer's choosing.

10.4.2 The Chaos Cola Company

An interesting mega-corporation, in that it used to be in the soft drinks market and ended up in a very hostile take-over by a German computer security firm (the CCC) in 2036. CCC managed to co-ordinate a most effective stock-price dump, combined with an almost-instant buy-up of the stock and went from owning 0% to 95% of stock and effected a name-change at the very next AGM.

10.5 Armed forces of note

10.5.1 Free Stockholm Mercantile Corps

Free Stockholm Mercantile Corps is the national army of Free Stockholm. It is one of the largest regular mercenary outfits in the world, with close to 800 000 regular members (not all on active duty at all times). The services provided by FSMC range from bodyguard and courier duties up to full-scale invasions, even though their preferred mode of operation is to provide "operational specialists". In the few cases FSMC has been contracted to perform a full-scale invasion, they have in general subcontracted quite a lot of the actual manning of the lines, since new members are a limited resource.

FSMC is the main source of income for Free Stockholm.

10.5.2 Luna Space Commandoes

Luna Space Commandoes is the only large outfit around that specialises in vacuum warfare. In combat, they generally use battle-suits with their proprietary modifications (heat is a problem with the normal suits under airless conditions) and heavy transport ships.

LSC mainly operates on the surface of the Moon, though they have been known to operate on Mars and they have done the occasional commision in the asteroid belt.

Rumours of LSC taking over or out individual orbital stations is exaggerated. The one time it has happened, it was after Luna City was threatened with kinetic harpoon bombardment from the orbital station eventually decommissioned (with extreme prejudice).

Chapter 11

Magic (optional)

This chapter is strictly optional.

11.1 History

Magic in the form presented here was discovered by more-or-less accident at the University of Linköping, in the year 2010 CE, by an aspiring young student of Computer Science. He occasionally found himself falling asleep in the computing labs and waking up in front of the snack food machines or standing outside a toilet. After having made sure he was either very very good at avoiding obstacles (including locked doors) or somehow getting from place to place he started experimenting. What he found was that by concentrating really hard and visualising himself elsewhere, he could be there. However, the practical limitations were that he had to know the place where he wanted to be quite well and also know exactly where it was in relation to his current position. The few times where he played loose with the latter conditions, he found that he tended to end up where he thought the place he wanted to end up was.

Later on, this line of study was taken up by some of his friends and they found that they could cause other effects, like heating or moving things at a distance. They did find that it was surprisingly hard work and decided to stop playing around when one of the group managed to end up quite dead, after having chilled her brain down to a temperature somewhat below freezing.

11.2 Mechanics of magic

Magic is effectively energy manipulation at a distance. It requires good concentration and visualization skills. There's no "free energy" involved, so to lift an object weighing 1 kg, enough energy to counteract the local gravity (9.8 Nm/s^2 on Earth) must be provided (again, on Earth, that's 9.8W). Depending on what energy sources are locally available, the conversion factor from "consumed off the energy source" and "usable by the magician" varies from about 0.01 to 0.9, with the remainder ending up as waste heat in and around the magician and the energy source.

Likewise, the maximum amount of energy that can be channeled varies from magician to magician.

11.3 Game mechanics

As a general rule, there's (at least) two dice rolls to make for all magic effects. One to see if the required power source has been latched on to and one to see if the desired effect has succeeded.

This means that depending on the effect wanted, more than two rolls may be necessary. Take the traditional way of making a "fire ball". First, latch on to a power source, then exert inwards

pressure on a spherical volume of air. After that, heat that sphere up and finish off by making it move.

The maximum power that a magician can channel varies as the cube of WIL. This is the power that gets through after loss. Loss is measured as a percentage of total energy used (there's a multiplier in the Power Loss table (p. 51), that can be applied to the power needed for the spell, to see the total power drained).

Table 11.1: Magic power channeling table
Maximum power is $2 * \sqrt{(1.1W)^3}$ (W = WIL).

WIL	Max W
2	11
3	36
4	85
5	166
6	287
7	456
8	681
9	970
10	1330
11	1770
12	2300
13	2920
14	3650
15	4490
16	5450
17	6540
18	7760
19	9130
20	10650

Estimate that half of the power lost ends up dissipating inside the magician as waste heat. If we apply normal rules-of-thumb, she will have a brain weighing ca 1.5 kg and for each second of dissipating 4.5 kW¹, her brain will increase its temperature by 1°C. Further, assume that increasing the temperature more than 6°C will kill the magician.

Depending on exactly what magic effect the magician is looking for, we have to apply slightly different rules-of-thumb. Heating and cooling is a “simple” matter of adding or removing energy (thus, heating is easier, since that doesn't require latching on to whatever is being cooled as an energy source).

11.3.1 Teleportation

Teleportation is accomplished by (effectively) convincing the teleported object (and the world) that it is elsewhere. It is widely believed that the upper range for teleportation is in the range of 2 km, seeing as how no one has successfully survived a teleportation of a longer distance. By an interesting quirk, it's easier to teleport conscious, cooperating beings rather than inanimate objects. Why this is, isn't know. For game-specific ranges, see table 11.3 on p. 52.

11.3.2 Telekinesis and levitation

Telekinesis is making things move and fly by manipulating the forces operating on them. This is used for quite a few magic effects.

¹I am assuming tha the brain is, roughly “half fat, half water” for the purpose of calculating a specific heat, water is at 4.2, fat is at 1.7, giving “about three” and the brain is 1500 g worth of matter

Table 11.2: Magic power loss

INT	Loss	Multiplier
2	99.1%	110.2
3	98.0%	49.0
4	96.4%	27.6
5	94.3%	17.6
6	91.8%	12.3
7	88.9%	9.0
8	85.5%	6.9
9	81.6%	5.4
10	77.3%	4.4
11	72.6%	3.6
12	67.3%	3.1
13	61.7%	2.6
14	55.6%	2.2
15	49.0%	2.0
16	42.0%	1.7
17	34.5%	1.5
18	26.5%	1.4
19	18.1%	1.2
20	9.3%	1.1

11.3.3 Heating and cooling

Heating is done by pouring energy into the “target”, this is limited to what the magician can channel. It takes 4.7 KW for one second to heat 1 kg of water 1degC.

Cooling, on the other hand, is done by latching on to the “target” as a power source and simply channel energy from it. This requires more concentration and the need of having somewhere to dump the extracted energy.

One needs to pump in as much energy to heat something up as one needs to take away to cool it down. Note that freezing and thawing (“solidifying” and “melting”) have slightly different requirements. For specific numbers, consult a physics or chemistry handbook.

11.4 Magic Skills

11.4.1 Magic power manipulation

Attr: INT Base: 0 Cost: 5

Attr: INT
Base: 0
Cost: 5

This is the skill for latching on to power sources. A successful roll must be made to operate at normal efficiency. A missed roll means losing power as if INT was 2 lower (so someone with INT 20 and a normal loss of 9% would suddenly operate at a loss of 26%). A missed roll for someone with an INT of 3 or lower is a plain failure.

Once latched on to a power source, the magician stays latched until she either willingly disconnects or until WIL/2 minutes of not drawing any power has passed.

This skill can also be used to scan for power sources and power flow. A magician not taking pains to be unobtrusive tends to stand out fairly well to other magicians nearby.

11.4.2 Magic teleportation

Attr: PER Base: 0 Cost: 5

Attr: PER
Base: 0
Cost: 5

Table 11.3: Teleportation, maximal range

Self range is $\frac{1}{1+e^{-\frac{P-9}{1.8}}}$.

PER	Self	Willing, conscious	Unwilling unconscious	Inanimate
3	69	23	5	10
4	117	39	9	17
5	196	65	15	28
6	318	106	24	45
7	495	165	38	71
8	729	243	56	104
9	1000	333	77	143
10	1271	424	98	182
11	1505	502	116	215
12	1682	561	129	240
13	1804	601	139	258
14	1883	628	145	269
15	1931	644	149	276
16	1960	653	151	280
17	1977	659	152	282
18	1987	662	153	284
19	1992	664	153	285
20	1996	665	154	285

This is the skill for teleporting oneself, others and inanimate objects. For teleporting of self, the maximum range is 100*PER metres, for teleporting other willing, conscious subjects, the maximum range is 50*PER metres and for teleporting inanimate objects the maximum range is 10*PER metres.

11.4.3 Magic telekinesis

Attr: INT **Attr:** INT **Base:** 0 **Cost:** 5
Base: 0
Cost: 5

This is the skill for moving objects at a distance. This covers both “move the whole object” and “impart momentum to parts of the object” (like, say, magically punching someone in the nose).

11.4.4 Magic energy manipulation

Attr: WIL **Attr:** WIL **Base:** 0 **Cost:** 5
Base: 0
Cost: 5

This is the skill that governs increasing the temperature of an object (for cooling an object down, refer to 11.4.1).

11.4.5 Rules for specific “spells”

At the GM’s and player’s discretion, a spell-effect the character is using “a lot” can be specified as a specific skill (latching on to a power source is still done as normal, but specific rolls of TK, energy manipulation and teleportation are bundled into the over-all “specific spell” skill). All these special-purpose skills have a skill point cost of 4.

11.4.6 Specific spell effect

Attr: Varies Base: 0 Cost: 4

Attr:
Varies
Base: 0
Cost: 4

This skill is handled as per 11.4.5. Basically, this skill bundles one or more rolls of all magic skills **except** Magic power manipulation (p. 51 11.4.1) into a single roll.

The intention is that this skill is used for things the character is doing often or has done often (either in play or in the character back-story). Remember that these skills are at the GM's discretion.

11.5 Examples

Chapter 12

Example scenario

12.1 Brief description

The characters are contracted by the Free Stockholm Mercantile Corps to accomplish two tasks. The first task is to acquire the formula for a vaccine against space flu and the second, two-three months later, when a suitably large batch has been made, to transport 4l of vaccine to the Lagrange Space Station, where it will be distributed and hopefully save the station from an epidemic in the making.

The vaccine is currently the property of Chaos Cola Company, presumably in their Berlin HQ. It is believed that a quick raid and a cat-burglar entry will be all that is needed. Transportation and, should it be needed, additional equipment can be provided by FSMC, though any losses will be docked from their final payment.

An ideal party would have at least one courier, at least one space merchant and hopefully one or more ex-military heavies.

12.2 Introduction

The characters have all seen and responded to an ad in “Freebooter International”¹, the trade magazine for legally grey employment. They’ve all arrived at a small office in Stockholm and it is heavily hinted that the job they’re about to be briefed on is underwritten by FSMC.

As the characters enter the small office, they’re met by Lt. Col. Pallin, FSMC Intelligence.

Welcome, my name is Lieutenant Colonel Jeanne Pallin. I am with a military organisation, as you might have understood from my title. We have a job that is medium-risk, medium-term, well-paying. All reasonable expenses will be paid. You will execute one action of industrial espionage and one long-distance courier mission, using proceeds from said industrial espionage.

Any of you who feel reservations about taking this commission, please leave the room now. If you stay for further briefing, you will have to sign a non-disclosure agreement, limited in time for up to three years and we will contract the Free Stockholm Mercantile Corps to enforce said NDA.

Lt. Col. Pallin waits until it is clear those in the room wish to stay, contracts are brought out and signed.

¹Interested in a medium-term job? We're talking 2-6 months, good health benefits, some specialist equipment provided. You are a former courier, have access to space transportation or an extensive military background. We prefer to be unnamed, until such a point we have agreed on a joint business venture. Pay starts at 10 000 Cr per person, but can be higher for specialist skills or a well-knitted team.

Thank you. I am here on behalf of FSMC Intelligence. We are in dire need of vaccine against Space Flu, strain C20, partly for future internal use and partly to fulfil a contract with Lagrange Station. Unfortunately, the process for making said vaccine, a suitable RNA sequence and some test samples are currently in the possession of the Chaos Cola Company. Our intelligence indicates that it is being kept in the CCC HQ in Berlin. We will need you to enter the building, locate the lab, steal a few samples and copy the process and sequencing data. We can provide covert transportation, chameleon suits and, if needed, loan you other specialist equipment. Unfortunately, our budget will not stretch to cover this equipment, should it be lost or damaged, so it will have to be covered out of your fee. However, we have a fairly comprehensive insurance cover and we do pay “danger money”, so should it be that you will have to abandon some or all of the equipment due to, say, a fire-fight, most of the cost will probably be covered by the insurance.

After you have, ahem, acquired these assets, you will have to return to Stockholm, where we will produce as much vaccine as we can in two months. You will then have to act as couriers to Lagrange Station, where you will deliver the shipment to our local representatives, for further distribution. The pay schedule is one quarter now, one quarter after the assets are delivered to Stockholm, one quarter before the courier phase of the mission starts and the remainder upon successful delivery. We pay in Credits. Should you wish to have payment done in an as untraceable as possible fashion, we can assist with that, at only a 0.1% charge. After successful completion of this mission, you can, if you wish, be put on our subcontractor list and as such you will have access to equipment at a discounted price and, should you wish, training at one of our many facilities.

The equipment that will be provided no matter what is chameleon suits with power packs, a stealth fighter with pilot and maps of the target building and surrounding city blocks. If asked-for, an electronic lock-pick can be provided. Combat suits are available, but anything heavier than a light powered armour will only be provided to someone with 40% or more in Combat Suit skill.

12.3 CCC Berlin HQ

The interesting part of the CCC HQ is the top floor, where the board offices and the high-security lab is located. There is a map at p.60.

There are four security guards (p. 58) on duty in the building during off hours. One is stationed at the street-level entrance, one is stationed at the security post on the top floor and two are acting as roving security patrols, sweeping the whole building (in singles) on a random schedule.

The guards wear their body armour at all times, just in case. On average, there is a break-in attempt once every two months, so the guards stay relatively sharp.

The guards will open fire or attack with the sabre (depending a bit on exactly where they are) shortly after having challenged anyone they don't recognise in the building out-of-hours. In general, anyone challenged has about five seconds to behave extremely non-threatening and being able to produce a valid employee or subcontractor pass-card at very short notice. Any CCC employee wanting to work overtime needs to make Security aware before evening comes. The floor where they're the most relaxed is on the top floor, since they have a much better idea of who is on that floor.

Basically, all the players need is in the laboratory (room 3 on the map), though further investigation can reveal other items of worth.

12.3.1 Rooms of interest

1. Stairwell and security checkpoint

This is a spiral staircase leading down to the rest of the building and up to the roof helipad. This is the most likely point of entry. The security checkpoint is manned at all times by

one security guard. Entrance to the rest of the top floor is via sliding steel doors, controlled from the security desk. The switch to activate the door is clearly labelled.

2. Lab checkpoint

The lab checkpoint contains a monitoring station for the enclosed lab. Access to the lab is via an airlock. The lab is a biocontainment level IV facility, at lower-than-atmospheric pressure. There is one security guard posted in this room, between 06:00 and 22:00 all days of the week. Between 22:00–06:00, the room is irregularly checked by roving security patrols (for each segment of 10 minutes the characters are in the room, roll a D5, if the result is 1, a security patrol will check this room). Any security guard entering this room will see any character inside the lab itself,

The checkpoint is surrounded by 20 cm of concrete and armour-plate sandwich (this includes ceiling and floor),

3. Lab

This is the lab area. There is a computer workstation in here, connected via optical fibre to the servers. There is also a bewildering array of samples and equipment. With some careful searching (either a successful Spot Hidden or 30 minutes searching) the Strain C20 samples will be found. Retrieving the procedural data from the workstation is a breeze for anyone with Computer Usage at 2 or higher.

4. CEO Office

Lush room, heavy carpet on the floor, oak desk, large leather chair. In one corner there is a drinks cabinet, containing a fair selection of spirits and mixers. In the top left drawer of the desk, taped to the back wall, is a small envelope, containing the secret recipe for Chaos Bubblyjuice, the seventh most popular drink in Known Space.

12.4 Wait for production

Depending on how noticeable the characters were during their break-and-enter at the CCC HQ, they will either have two months of top quality relaxation and training at an FSMC training camp or being hounded. If the heat is on to them too bad, FSMC will not protect them, that'd be "bad economy". This would be if they trashed the place and killed more than one guard.

12.5 Take-off And Lagrange Station

If the characters have access to a lander of their own, they'll be heavily pushed towards using it. Lacking that, one will be provided by FSMC and piloted by a combat veteran. Mere minutes before boarding, carrying a cool-box containing 4l of vaccine and a data disk, the party are ambushed by CCC security guards (see p. 58).

If the characters are using FSMC transport, their pilot will simply put down smoke grenades and shuffle them in the general direction of the lander and execute an emergency take-off as soon as everyone is in. If the characters are on their own, let them decide what's happening.

The trip up to Lagrange Station takes about 20 hours of long, boring flight. Lagrange Station is a rotating toroid space station (see p. 61), 1 km in largest diameter, with the toroidal tube having a diameter of 100 m. Lagrange Station is the home of ca 3 million people. Docking facilities is in the counter-rotating hub section. This section also contains all microgravity production facilities. Landers will be shifted into the spokes for storage while the owner(s) are on the station.

On the station, the characters will need to deliver the vaccine to the FSMC representative. After delivery, production of more vaccine will start immediately and the 4000 doses the characters have delivered will be administered to dock workers, customs inspectors and health care personnel.

There are, basically, two ways to play this encounter, depending on the GM. Either it's a straightforward "dock, look up the FSMC office in the directory, execute delivery, get paid, finito"

or (if wanted) one can place all sorts of CCC-contracted assassins on the route, with the entanglement with the legal office this would cause.

12.6 NPCs

12.6.1 Lt Col Jeanne Pallin

Jeanne is a short, blond, good-looking woman with an attitude. She keeps her hair cropped close to her head.

Stats and skills should be unnecessary for her, since she won't, as such, be in direct confrontation with the characters. If needs be, her stats can be summarised as "über-competent". Feel free to equip her with an array of nasty knives and a silenced pistol or two.

Jeanne is 32 years old and has been serving in the FSMC since the age of 14. She gravitated towards Intelligence section since she had a natural aptitude for covert work and data analysis. She has also pulled a stint as instructor at the FSMC paratrooper training facility.

12.6.2 FSMC Lagrange Station representative, Major Englund

Major Peter Englund is a tall, thin and wiry man, wearing thin glasses. His head is shaven and he sports a penil-thin moustache. He is surprisingly relaxed and laid-back for an FSMC official, but doesn't quite engage in "chuminess".

12.6.3 CCC Security Guard

All guards have a comms radio, wired to a headset and throat mike. The radio is stress-activated and very hands-off in operation. They also have CCC-issue cellular phones, being able to slave audio to either the head-set or radio, though that requires actually manipulating a switch.

Stats and skills

CCC Security guards

STR	12	INT	11
CON	13	POW	9
AGL	13	PER	15
CON	16	hp	25
		fatigue	25

Skill	%
Assault Rifle	26
Dodge	43
Edged sword	31
Glock 17	32
Pistols	31
Rifles	30
Sabre	40

Equipment

- Impact-resistant vest with trauma plates (8 abs)
- Comms radio
- 4 spare magazines for the Glock 17
- Glock 17, full mag loaded, 1 bullet ready
- First-aid kit

- Cellular phone
- Pass-card, bypassing all security checks
- Sabre in scabbard
- Assault rifle (roll a D10, 1-7 means it's a light AR, otherwise it's a heavy)

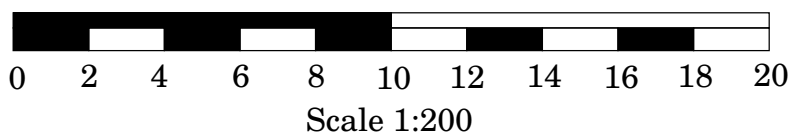
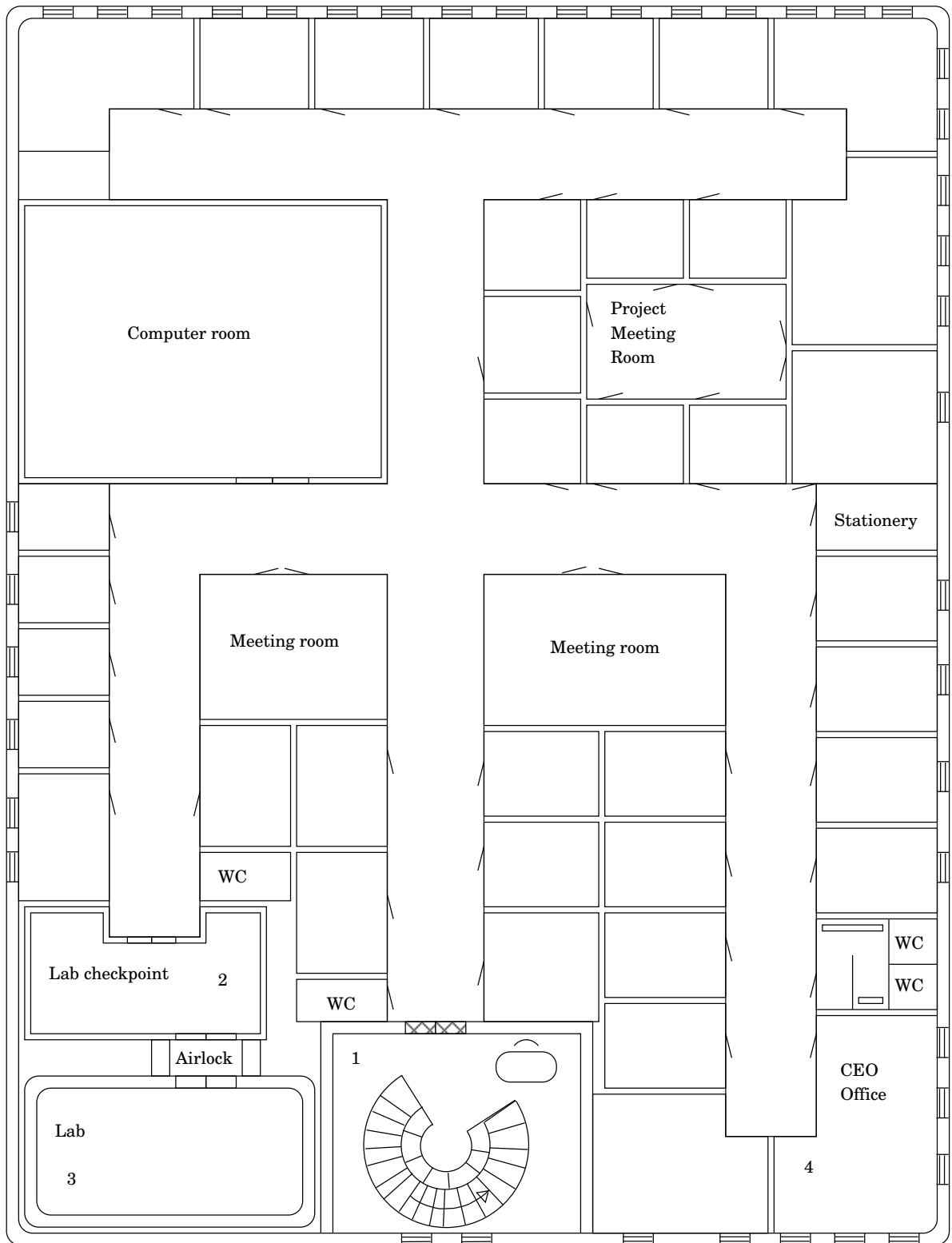
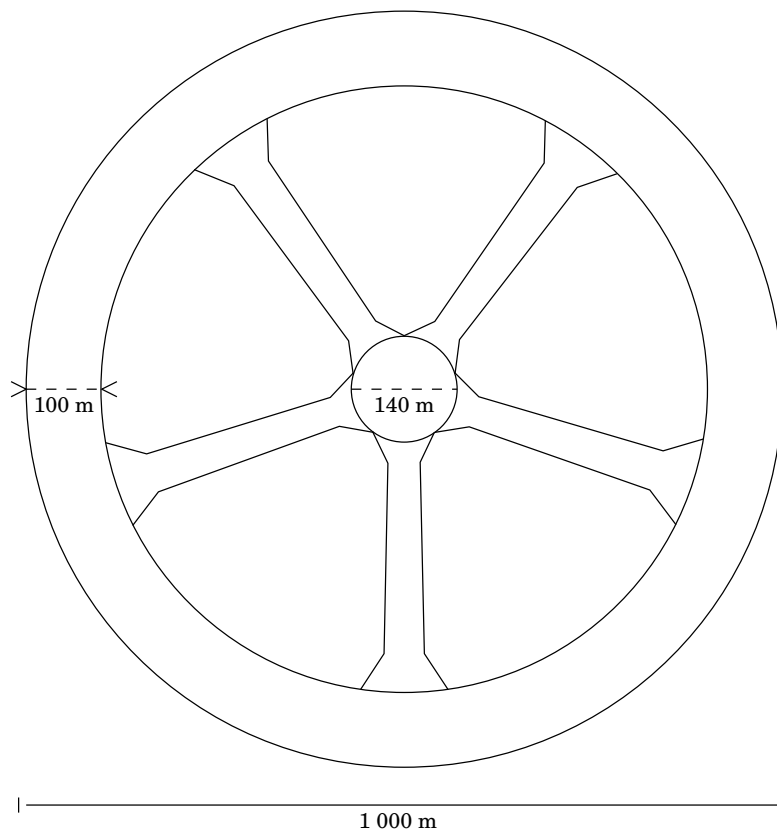
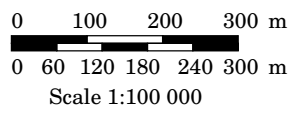


Table 12.1: Lagrange Station, spin-axis view



Chapter 13

Other rules

13.1 Cybernetics

There are cybernetic replacements for body parts (there's even some enhancement available). However, for the most part, cybernetics is limited to medical replacement of missing limbs (or other functions). A cybernetic arm is about as strong as a decently strong human. A cybernetic hand, likewise. While you can get them with some built-in tools, in general it's easier carrying these tools in a backpack. More convenient and better feedback.

Cybernetic eyes work, though they do give a somewhat grainy image of the world. In this field, there's some available enhancements over "human standard issue". You can get your cyber eyes with zoom, with IR, with UV sensitivity or with light amplification. Recording to a data medium is a standard, though the (dedicated) recording device needs to be purchased separately. The recording is at-will and the storage medium can store up to 12 hours of full video. Note that this video is bound to be quite jerky in the raw state, since it's a recoding from what the implant eye(s) are seeing, not what ends up interpreted by the wearer's brain.

One distinct drawback to cyber kit is that it needs a power source to work and is thus much easier to sense and detect, compared to a standard-issue human.

Studies have shown no detrimental effect in magic-use by cyber implants and it could be argued that it's a good way of making sure one keeps powercells around.

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